NIPPON Genetics EUROPE
INNOVATION FOR YOU

CATALOG

16th Edition

- DNA Electrophoresis
- Protein Electrophoresis
- Gel Documentation
- Lab Instruments
- Lab Devices
- Lab Plastic
- NAP Kits
- Cloning Enzymes
- (q)PCR Enzymes
- Cell Biology

CONTENT

NIPPON GENETICS EUROPE 6

NEW PRODUCTS 12

DNA ELECTROPHORESIS 14

PROTEIN ELECTROPHORESIS 30

GEL DOCUMENTATION 44

LAB INSTRUMENTS 62

LAB DEVICES 74

LAB PLASTIC 84

NUCLEIC ACID PURIFICATION 104

CLONING ENZYMES 112

(q)PCR ENZYMES 120

CELL BIOLOGY 134

NIPPON Genetics EUROPE GmbH

Company Profile

NIPPON Genetics EUROPE - Innovation For You!

NIPPON Genetics EUROPE is a young, dynamic and forward thinking company dedicated to providing high quality laboratory products to researchers and scientists across the world. With two decades of experience, we are specialists for life science and biotechnology solutions and have become a trusted partner in the scientific community. Our mission is to deliver innovation and support to help scientists to achieve their goals and make a positive impact on the world.

Our life science portfolio

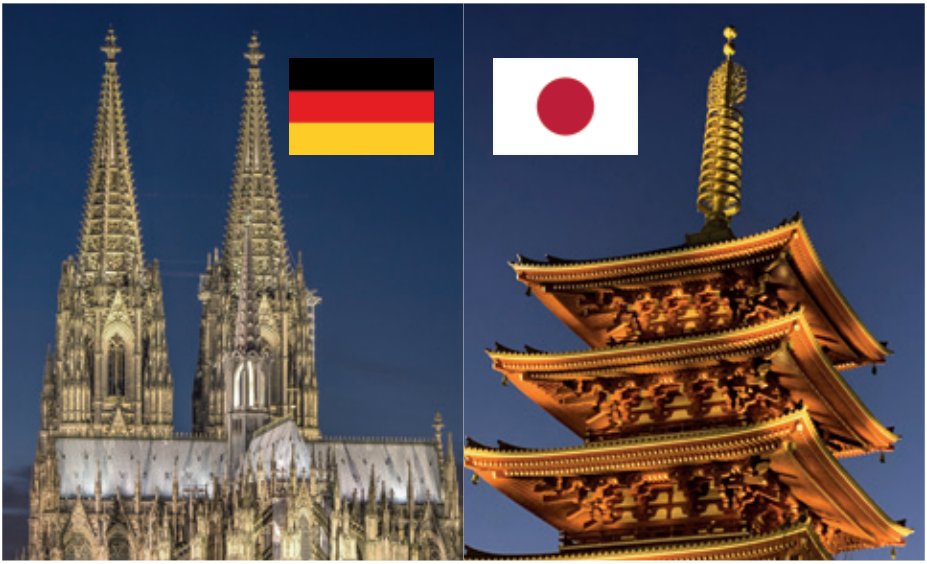
Our extensive product range is at the forefront of life science technology and includes instruments such as gel documentation systems, real-time PCR systems and spectrophotometers. But that's not all. We also offer a comprehensive range of DNA and protein electrophoresis reagents, nucleic acid purification kits, PCR enzymes, plastic consumables, cell biology products, and much more. Our team of experts is always excited to work with researchers on custom solutions to ensure that unique experimental needs are met.

NIPPON Genetics EUROPE
INNOVATION FOR YOU

1988	2005	2007	2008	2010
Foundation of NIPPON Genetics Co. Ltd in Japan	Foundation of NIPPON Genetics EUROPE GmbH in Germany	Creation of our FastGene® brand	Introduction of the MIDORI^{Green} Dyes	Establishment of a German Sales Team

IN 20 YEARS

NIPPON Genetics EUROPE 2005-2025



A German-Japanese success story

Founded in 1988 Tokyo, Japan, NIPPON Genetics has more than 35 years of experience in the life science sector. NIPPON Genetics stands for the highest quality and innovation from Japan. In 2005 NIPPON Genetics EUROPE was established in Düren, Germany, in the heart of Europe. With more than 30 employees, we distribute our products from here directly in Germany and Austria, as well as in more than 70 countries worldwide with the help of our distribution partners. We are committed to maintaining outstanding quality, delivering customer value and ensuring reliable service.

Celebrating 20 years of innovation

This year, NIPPON Genetics EUROPE marks 20 years of pioneering advancements in life sciences. Founded in 2005, our journey has been one of continuous innovation, from bringing high-quality Japanese technologies to Europe to developing our own groundbreaking solutions. Driven by collaboration with researchers worldwide, we have introduced safer, more efficient methods in molecular biology, including our award-winning FastGene® FAS-X system. Looking ahead, we remain committed to innovation, sustainability, and customer-driven solutions that shape the future of research. Thank you for being part of our story—here's to the next 20 years!

Dr. Juergen Luenzer
CEO of NIPPON Genetics EUROPE

2011 Launch of the Cell Freezing Media Bambanker

2014 Introduction of the unique Blue/ Green LED Light technology

2018 ISO 9001:2015 Certification for Quality Management

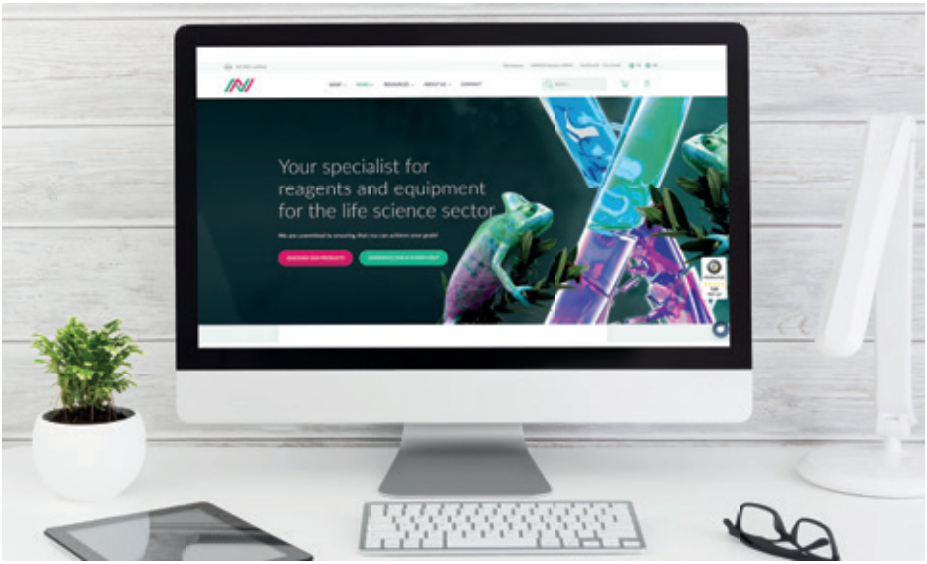
2022 Launch of the FastGene® qFYR Real-Time PCR System

2023 Launch of the FAS-X gel documentation System

2025 Celebrating 20 years of innovation

Website

www.nippongenetics.eu



Our website

Our website is the central information source for you! Here you can find all the information you need about our products. Whether you need a manual, MSDS, safety report or other material, just visit our website and download everything you need. We are always happy to receive your feedback about our service and products.

You can also find Technical Notes about many of our products, which we create with scientific enthusiasm in our laboratory. Furthermore, we get great feedback from the scientifc society, which leads to the creation of various Application Notes.

Customers from Germany, Austria and the Netherlands can directly order products in our webshop. Every product page is available in English or alternatively in German or French.

GeneFan and GenePartner

Join the GeneFan community to unlock exciting benefits, including exclusive promotions and updates about our products. Simply register on our website in the GeneFan section to start enjoying these perks.

For distributors, GenePartner is your dedicated hub. Access essential distributor-specific information and resources by registering on the GenePartner section of our website. Need assistance? Contact us anytime, and we'll be happy to help!

www.nippongenetics.eu

Contact Our Team

NIPPON Genetics EUROPE GmbH

Contact our team

For comprehensive support and detailed product information, visit our contact page. You can also email us directly or call us. Our team is here to assist you with any inquiries about our products and services.

www.nippongenetics.eu/en/contact/

info@nippongenetics.eu

+49 2421 5549 60

Meet our sales team in Germany and Austria

In Germany and Austria, we are happy to offer personalized advice and on-site consultations, including product demonstrations tailored to your needs. To connect with the sales representative for your region, please visit:

www.nippongenetics.eu/sales-team

Quality Management

ISO 9001:2015 certified

ISO 9001:2015 certification

NIPPON Genetics EUROPE not only stands for high product quality but also for high quality of service. To maintain and further develop our quality-driven values, we have certified our quality management system according to ISO 9001:2015. Our idea of analyzing, reflecting and improving is key to maintain our high-standard.

We see the quality management certification as a central tool to improve our quality continuously. Therefore, we are performing audits on a regular basis to ensure the ISO 9001:2015 standards.

NIPPON Genetics EUROPE is certified for applying a management system in the fields of trade, manufacturing and service, in accordance with the standard DIN EN ISO 9001: 2015 (Management System)

Our Brands

NIPPON Genetics EUROPE GmbH

NGE in-house brands

We are determined to use our technical expertise and many years of experience in the life science market to offer specially developed and optimized products. Always dedicated to adapt our innovation-driven technologies to the special needs of our customers. Our in-house product brands stand for highest quality standards, the best customer benefit and great reliability. All that for a very fair price.

FastGene®

Reagents, Enzmyes, Lab equipment

MIDORI Green

Safe DNA stains

FAS

Fluorescence Analysis System
Gel Documentation Systems with
BG BLUE GREEN LED

Our selected manufacturers

To offer our customers the entire life science portfolio, we collaborate with companies that meet our high quality standards and provide us with carefully selected product lines. We rely on renowned Japanese manufacturers, who also set customer satisfaction, innovative technologies and best product quality as their highest priority.

Mupid®-One

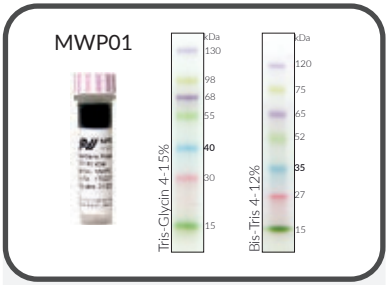
DNA gel electrophoresis system
(Takara, Japan)

Bambanker™

Cell cryopreservation media
(GC Lymphotec Inc., Japan)

New Products

New



FastGene® Prestained Protein Marker (15–130 kDa)

Seven sharp bands in five colors ensure precise protein sizing on SDS-PAGE and Western Blots. Ready-to-use with loading buffer, it covers key housekeeping proteins for accurate molecular weight identification.

PROTEIN ELECTROPHORESIS **Page: 41**

FastGene® qFYR Plus 6 Channel Real-Time PCR System

Now with 6 Channels! Fast, precise qPCR with a 96-well gradient block, high-resolution melt analysis, and superior optics for reliable, cross-talk-free detection in gene expression, genotyping, and pathogen analysis.detection. Reliable results, every time.

LAB INSTRUMENTS **Page: 64**

FastGene® CapMaster Pro

Automate cap opening and closing with one hand for increased lab efficiency. Compatible with various screw-cap tubes (11–40 mm), it features five operation modes, a compact design, and a stable base for secure use.

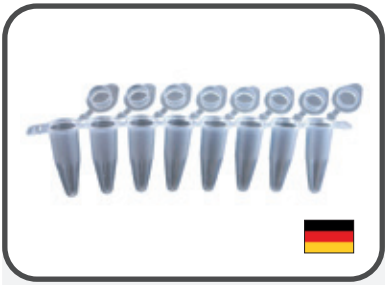
LAB DEVICES **Page: 76**

FastGene®Filter Tip Racks

Autoclavable up to 100 times, these sturdy racks ensure stability with a non-slip rubber mat. Designed for FastGene® Filter Tip Refill Boxes, they support eco-friendly lab practices without compromising precision or efficiency.

LAB PLASTIC **Page: 88**

New Products



8-Well Strips
Premium German Quality

Certified RNase, DNase, and human DNA-free, these ultra-thin-walled PCR tubes ensure optimal heat transfer and leak-proof reliability. Compatible with all standard PCR/qPCR applications, they guarantee precision and fast global delivery.

LAB PLASTIC **Page: 93**

FastGene® Serological Pipettes

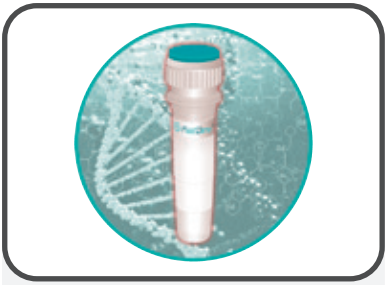
Designed for accurate liquid handling, these sterile, polystyrene pipettes feature bidirectional graduations, color-coded markings, and high-quality filters. RNase/DNase and pyrogen-free, they ensure reliable performance in cell culture, microbiology, and lab applications.

LAB PLASTIC **Page: 102**

FastGene® Blood & Tissue gDNA Extraction Kit

Extract high-yield, high-purity gDNA from blood, tissue, or cells with a simple protocol. Includes all necessary reagents, Proteinase K, and DNA binding columns for reliable PCR, qPCR, and enzymatic applications.

NUCLEIC ACID PURIFICATION **Page: 110**



FastGene® Scriptase III

Engineered for structured RNA, this thermostable enzyme remains active up to 55°C, enabling efficient cDNA synthesis from minimal RNA amounts. Ideal for Real-Time PCR, NGS, gene expression, and challenging RNA templates.

(q)PCR ENZYMES **Page: 124**

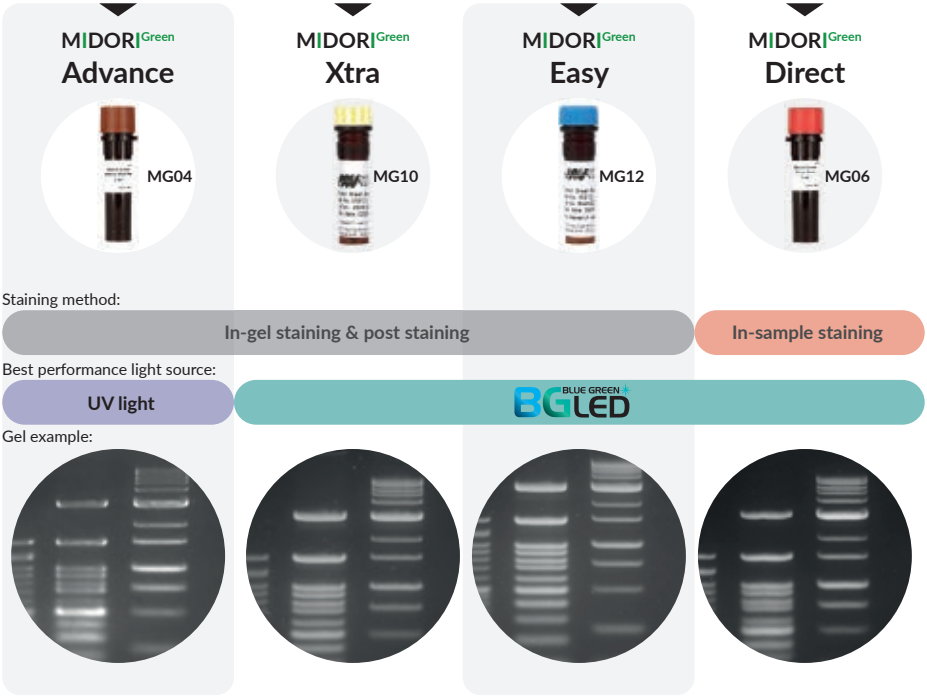
DNA ELECTROPHORESIS

MIDORI^{Green} Dyes Overview	16
MIDORI^{Green} Advance	17
MIDORI^{Green} Xtra	18
MIDORI^{Green} Easy	19
MIDORI^{Green} Direct	20
MIDORI^{Green} Agarose Tablets	21
Agarose	23
Gel band Cutter and Buffers	24
MUPID^{TM}-ONE Electrophoresis System	25
DNA Marker	28

MIDORI^{Green} Dyes Overview

Flexible solution for all light sources

The MIDORI^{Green} dye set offers flexible solutions for gel staining and documentation. Advance, Xtra, and Easy are added to melted agarose, while Direct allows staining directly in the sample. Advance delivers the strongest DNA signals under UV light, while Xtra, Easy, and Direct perform best with visible light, especially Blue/Green LED technology. Whichever MIDORIGreen dye you choose, all provide excellent DNA signals and are certified safe by external labs.



Ordering information

Cat. No.	Product	Content
MG04	MIDORI^{Green} Advance	1 ml (25.000x - for staining 25 l of agarose)
MG10	MIDORI^{Green} Xtra	1 ml (25.000x - for staining 25 l of agarose)
MG12	MIDORI^{Green} Easy	0.4 ml (10.000x - for staining 4 l of agarose)
MG06	MIDORI^{Green} Direct (with loading dye)	1 ml (10x conc. for direct use in sample)

MIDORI[Green] Advance

- Safe alternative to ethidium bromide
- Optimal for UV light
- Highly concentrated

The perfect dye for UV light

MIDORI[Green] Advance is a safe and effective alternative to traditional DNA stains like ethidium bromide. Non-carcinogenic, non-mutagenic, and non-toxic, it provides exceptional sensitivity for detecting dsDNA, ssDNA, and RNA. The dye delivers optimal signal results when used with UV light transilluminators.

MIDORI[Green] Advance | Ethidium bromide

Comparison of sensitivity between MIDORI[Green] Advance and ethidium bromide using a UV transilluminator.

Highly concentrated

MIDORI[Green] Advance is a highly concentrated dye (25,000 x), making one tube sufficient for staining up to 25 liters of agarose. It offers exceptional sensitivity, even for small DNA fragments, and delivers an excellent signal-to-noise ratio for reliable results.

Trusted & Proven

MIDORI[Green] Advance is a reliable and safe DNA stain, trusted by researchers worldwide. With over 500 citations in leading scientific journals and glowing customer reviews, it is the stain of choice for high-performance, accurate DNA visualization.

Proven safety

MIDORI[Green] Advance delivers strong DNA signals comparable to the mutagenic stain ethidium bromide, but with the added benefit of being completely safe to use. Extensive testing has confirmed that MIDORIGreen Advance is a reliable and non-toxic alternative for DNA visualization.

- Ames-Test
- Acute Oral Toxicity Test
- Chromosome Aberration Test
- Mouse Bone Marrow Micronucleus Test
- Latex and Nitrile Gloves Penetration Test

Cynthia Geelen
Netherlands Institute of Neuroscience
Amsterdam, Netherlands ★★★★★

"I am amazed at how well Midori Green performs compared to Ethidium Bromide, which I have been using throughout my working career. The comparable results have made it an easy choice for me to switch to create a safer workplace"

Ordering information

Cat. No.	Product	Content
MG04	MIDORI[Green] Advance	1 ml (25,000x - for staining 25 l of agarose)

MIDORI[Green] Xtra

- Ultra-sensitive and safe DNA dye
- Optimal for Blue/Green LED
- Almost no background

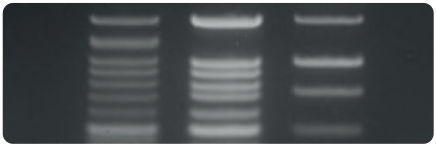
MIDORI[Green] Xtra: The revolution

MIDORI[Green] Xtra is a highly sensitive green fluorescent stain that provides safe DNA and RNA visualization in agarose gels. As a superior alternative to ethidium bromide (EtBr), it delivers remarkably low background fluorescence, making it easy to identify even small amounts of DNA. It also avoids any distortion, maintaining the same reliable migration pattern across different DNA concentrations.

Optimal for Blue/Green LED technology

MIDORI[Green] Xtra delivers excellent signal-to-noise ratios when used with Blue/Green LED light, providing unbeatable fluorescence for DNA and RNA visualization in agarose gels. While UV light or Blue LED light can also be used, Blue/Green LED light offers more efficient detection, ensuring safer and brighter results.

BG BLUE GREEN LED +



Ultra-high sensitivity of DNA bands detected with MIDORI[Green] Xtra (dilution factor 1:25000) using Blue/Green LED light.

Proven safety

MIDORI[Green] Xtra provides excellent DNA/RNA signals while being completely safe to use. Unlike ethidium bromide, this stain is non-carcinogenic, non-mutagenic, and non-toxic, ensuring no harm to the user. Its safety has been verified by independent laboratories.

SAFE

- Ames-Test
- Cytotoxicity Test

Convince yourself of the safety of our DNA dyes with the safety reports - available on our website

Ordering information

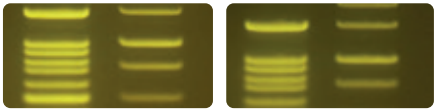
Cat. No.	Product	Content
MG10	MIDORI[Green] Xtra	1 ml (25,000x - for staining 25 l of agarose)

MIDORI[Green] Easy

- Ultra-sensitive and safe DNA dye
- Optimal for Blue/Green LED
- Identical protocol to SYBR® Safe

Excellent signal quality

MIDORI[Green] Easy offers the same excellent signal quality and low background as MIDORI[Green] Xtra. Optimized for visible excitation light, it delivers sharp, sensitive bands with outstanding clarity, especially when using Blue/Green LED technology. Designed for an easy switch from SYBR® Safe, it ensures your DNA signals reach the next level.

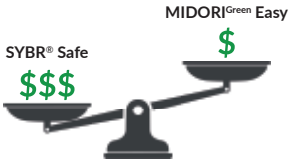


MIDORI[Green] Easy | MIDORI[Green] Xtra

MIDORI[Green] Easy shows the same ultra-sensitive and sharp DNA bands as MIDORI[Green] Xtra when using Blue/Green LED excitation light.

Easy switch from SYBR® Safe

MIDORI[Green] Easy makes switching from SYBR® Safe seamless, as no changes are required in your staining protocol. With the same dye concentration and tube volume as SYBR® Safe, it offers a more cost-effective solution—at less than half the price.



Less than half the price for a tube of MIDORI[Green] Easy compared to SYBR® Safe

Ordering information

Cat. No.	Product	Content
MG12	MIDORI[Green] Easy	0.4 ml (10,000 x - for staining 4 l of agarose)

MIDORI[Green] Direct

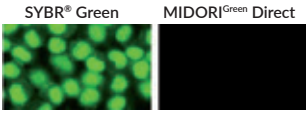
- Direct safe staining of DNA/RNA
- Loading dye included
- Very low background

Low background and high contrast signals

MIDORI[Green] Direct provides excellent contrast by directly staining double-stranded DNA, single-stranded DNA, and RNA in the sample. This eliminates background staining of the agarose, ensuring clear, high-contrast signals. Optimized for visible light transilluminators, it delivers the best results with our Blue/Green LED technology.

Safe and environmentally friendly

MIDORI[Green] Direct is impenetrable to latex gloves and cell membranes. It is classified as non-hazardous to aquatic life, and small amounts of MIDORI[Green] Direct stain can be safely released into the environment.



HeLa cells were incubated at 37°C with SYBR® Green I and MIDORIGreen Direct for 30 minutes. SYBR® Green I rapidly entered the cells, resulting in bright green nuclear staining. In contrast, MIDORIGreen Direct was unable to cross the cell membranes, as demonstrated by the absence of fluorescence staining.

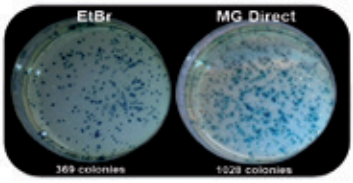
- Ames-Test
- Cytotoxicity Test
- Cell Membrane Permeability
- Hazardous Waste Screening
- Latex Gloves Penetration Test

Direct sample staining

MIDORI[Green] Direct comes with a 10X sample loading buffer, allowing you to add it directly to your samples and markers. No need to add additional dyes to the agarose gel matrix or running buffer, simplifying the process.

Better efficiency for downstream applications

DNA isolation from agarose gels is a routine process in biological research. Unlike intercalating dyes like ethidium bromide or GelRed®, which can inhibit enzymes and affect cloning efficiency, MIDORIGreen dyes bind directly to the DNA backbone. This ensures much higher success rates for downstream applications such as cloning, sequencing, or PCR.



DNA stained with MIDORI[Green] Direct showed improved recovery and transformation efficiency compared to EtBr. The isolated DNA was successfully transformed into E. coli and plated on selective media.

Ordering information

Cat. No.	Product	Content
MG06	MIDORI[Green] Direct (with loading dye)	1 ml

FastGene® MIDORI[Green] Agarose Tablets

- **Increase your reproducibility and safe time**
- **DNA dye is included (MIDORI[Green] Xtra or Advance)**
- **Only water or buffer needed**

Save time preparing gels

MIDORI[Green] Agarose Tablets simplify gel preparation by eliminating the need for weighing or mixing components. Just add to cold water or buffer, heat, and pour. Each tablet contains the perfect amount of MIDORI[Green] Xtra or Advance for consistent results.

Add tablet | Shake it | Heat it up | Pour in gel tray | Run the gel

MIDORI[Green] Agarose Tablets simplify your gel preparation with an easy, fast workflow. Just add the tablet to cold water (or buffer, if required), shake to dissolve, and heat until the solution is clear. Then, pour the solution into your gel tray, run the gel, and visualize your DNA bands. It's that simple!

FastGene® MIDORI[Green] Agarose Tablets

Achieve the perfect gel concentration

The MIDORI[Green] Agarose Tablets (Xtra or Advance) come with a detailed manual to help you prepare gels with the exact concentration you need. Just follow the instructions to dissolve the tablet in the recommended amount of water or buffer for consistent, reliable results.

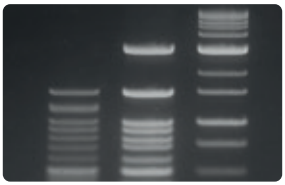
Choose the right tablet for your needs

NIPPON Genetics EUROPE offers a variety of MIDORI[Green] Agarose Tablets to suit your requirements. You can select between MIDORI[Green] Xtra or MIDORI[Green] Advance tablets, each available with or without buffer additives. Tablets with TBE (for MIDORI[Green] Advance) or TAE buffers require only water for dissolution, while tablets without buffer can be dissolved in the running buffer of your choice.

MIDORI[Green] Xtra Agarose Tablets

MIDORI[Green] Xtra Agarose Tablets **(without buffer)** 100 tablets

Cat. No.: AG12



Get the same excellent DNA signals as with the tablets as with the dyes, just with less effort and preparation time.

MIDORI[Green] Xtra **TAE** Agarose Tablets 100 tablets

Cat. No.: AG13

MIDORI[Green] Advance Agarose Tablets

MIDORI[Green] Advance Agarose Tablets **(without buffer)** 100 tablets

Cat. No.: AG11

MIDORI[Green] Advance **TAE** Agarose Tablets 75 tablets

Cat. No.: AG10

MIDORI[Green] Advance **TBE** Agarose Tablets 75 tablets

Cat. No.: AG09

Ordering information

Cat. No.	Product	Content
AG09	MIDORI[Green] Advance TBE Agarose Tablets	75 Tablets
AG10	MIDORI[Green] Advance TAE Agarose Tablets	75 Tablets
AG11	MIDORI[Green] Advance Agarose Tablets (without buffer)	100 Tablets
AG12	MIDORI[Green] Xtra Agarose Tablets (without buffer)	100 Tablets
AG13	MIDORI[Green] Xtra TAE Agarose Tablets	100 Tablets

FastGene® Agarose

- Molecular grade agarose
- Perfect separation of DNA/RNA
- Sharp and well-defined DNA bands

High-quality molecular grade agarose

FastGene® Agarose is specifically designed for precise separation of DNA fragments, including PCR products, plasmid DNA, and RNA. Its exceptional purity ensures excellent transparency and minimal background, making it ideal for molecular biology applications. This high quality results in sharp, well-defined DNA or RNA bands, even for low molecular weight fragments, providing maximum sensitivity and reliability in your experiments.

Reliable detection of small DNA bands

Detecting small DNA bands requires high-quality agarose. In a comparison, gels made with FastGene® Agarose and a competitor's low-quality agarose were analyzed using MIDORI^{Green} Direct and the Mupid™-ONE electrophoresis system (MU2). The results show a significant difference in signal quality, highlighting that FastGene® Agarose provides superior DNA band separation and clearer, more reliable signals, even for small DNA fragments.

Detection of small bands using high quality FastGene® Agarose and Competitor C's agarose. All seven bands from the ladder are visible when using FastGene® Agarose. When comparing the green box to the red box, Competitor C's agarose does not show the lowest three bands.

Agarose tablets - no weighing needed

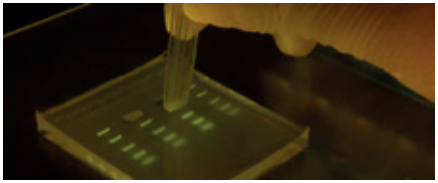
FastGene® Agarose Tablets simplify gel preparation by eliminating the need for weighing. Just add one tablet to 50 ml of gel running buffer, heat, and you'll have a perfectly prepared 1% agarose gel. It's quick, easy, and hassle-free.

The tablets can be dissolved in a running buffer of your choice.

Ordering information

Cat. No.	Product	Content
AG01	FastGene® Agarose	100 g
AG02	FastGene® Agarose	500 g
AG05-100	FastGene® Agarose Tablets	100 Tablets (0.5 g Agarose per tablet)

FastGene® Agarose Gel Band Cutter



Save time cutting DNA bands

The FastGene® Agarose Gel Band Cutter streamlines your lab work by allowing quick and precise DNA band cutting. It prevents contamination and protects the transilluminator surface, eliminating the need for sharp razor blades. Each cut band measures 6 mm x 3 mm, and multiple bands can be stacked in a single cutter, making large DNA purifications easier and more efficient.

- No scratches on glass surface
- Easily excise DNA bands
- Stack multiple DNA bands

Ordering information

Cat. No.	Product	Content
FG-830	FastGene® Agarose Gel Band Cutter	50 Units

Zeynep Weninger
Laboratory Biochemistry - Faculty of applied chemistry
Nürnberg Institute of Technology Georg Simon Ohm, Germany ★★★★★

"We are very happy using the FastGene® Gel Band Cutter and have successfully implemented it in our practical course. In the past, our students had issues cutting out the correct band without adding too much unnecessary agarose when using a scalpel and a tweezer. This is important since during the next step the same amount of extraction buffer has to be added to the agarose material. This problem was solved by using this product. We have tested similar products but they could not convince us."

Electrophoresis buffers

Solutions for consistent results

Our concentrated TAE (50x) and TBE (10x) buffers provide reliable, consistent concentrations for gel electrophoresis. Simply dilute to the required working concentration for fast, efficient preparation. The 6x NA Loading Buffer is added to nucleic acid samples to ensure proper sinking into the gel pockets, facilitating smooth electrophoresis.

Ordering information

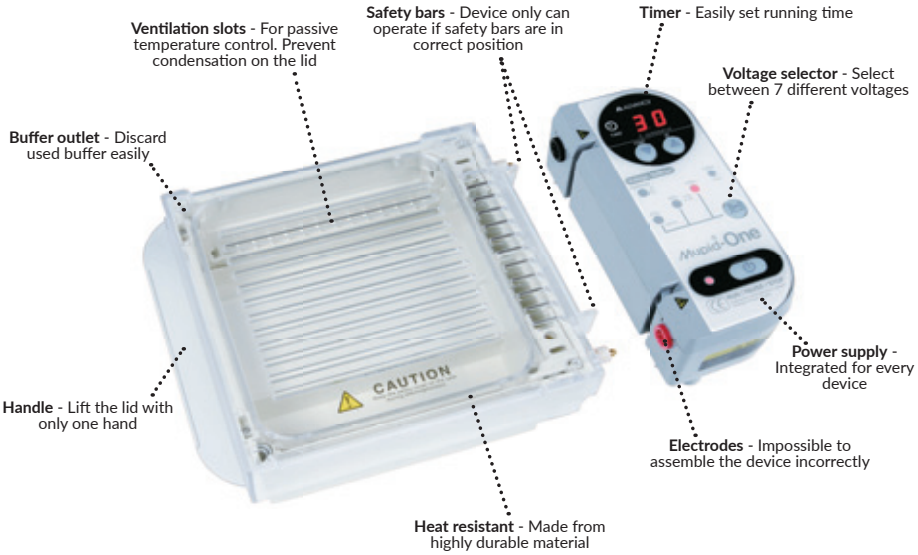
Cat. No.	Product	Content
ID1521	50x TAE Buffer	500 ml
ID1531	10x TBE Buffer	500 ml
ID1654	6x Nucleic Acid Loading Buffer	10 ml

TAE Buffer

TBE Buffer

6x NA Loading Buffer

Mupid™-ONE Electrophoresis System



- **Smart power supply**
- **Heat resistant material**
- **Multichannel pipette compatible**
- **Gel casting set included**

Smart and safe DNA separation

The Mupid™-One Electrophoresis System is designed for easy and reliable DNA separation. It features an integrated power supply, a convenient buffer drainage system, and support for multichannel pipettes. With seven adjustable voltage settings (18, 25, 35, 50, 70, 100, and 135 V), it offers flexible and efficient DNA separation. The built-in timer with an alarm function ensures precise run times, and all run parameters are automatically saved for consistency. Safety bars on the lid prevent operation if the lid is not properly secured, ensuring user safety.

Ordering information

Cat. No.	Product	Content
MU2	Mupid™-One	Mupid™-One electrophoresis system with 1x gel chamber, 1x power controller, 1x gel casting set, 4x combs, 2x gel trays S, 1x gel tray L

Mupid™-ONE Electrophoresis System

Gel casting set standard (ON-MS), included with the Mupid™-One.

Everything you need for a perfect gel

The Mupid™-One package includes the "Gel Casting Set Standard" (ON-MS), which features four versatile combs (13-well or 26-well, usable on both sides) and two types of gel trays: 2 small trays (S) for mini gels and 1 large tray (L) for larger gels. Additionally, the optional "Gel Casting Set Large" (GM-HR) is available, offering two large combs and a combination of 4 small trays (S) and 2 large trays (L) for increased flexibility in gel preparation.

SPECIFICATIONS		
Compact design	✔	Overall dimensions (H x D x W): 5.9 cm x 16.2 cm x 18.3 cm Bath volume: 270 - 320 ml
Integrated power supply	✔	Input voltage: AC100 V - 240 V, 50-60 Hz Output voltage: 8 V, 25 V, 35 V, 50 V, 70 V, 100 V and 135 V
Memory function	✔	Automatic memory function from the last use
Safety lid	✔	Without the lid, main power can not be operated
Multi-channel pipette compatible	✔	The included combs are multichannel pipette compatible
Optimal gel tray size	✔	Small gel tray: 130 mm (B) x 16.5 mm (H) x 59.5 mm (L) Large gel tray: 130 mm (B) x 24 mm (H) x 122 mm (L)
Optimal comb size	✔	Number of wells: 13 or 26 Spacing size: 9 mm (13 wells)

Ordering information - Accessories for the Mupid™-One

Cat. No.	Product	Content
ON-MS	Gel casting set standard	1x Mupid™-One gel casting set, 4x combs, 2x gel trays S, 1x gel tray L
GM-HR	Gel casting set large	1x Mupid™-One gel casting set large, 2x large combs, 4x gel trays S, 2x gel trays L
ON-GL	Large gel trays	2 gel trays L
ON-GS	Small gel trays	4 gel trays S
ON-SD	Gel casting stand standard	1 gel casting stand standard
AC-C1	Gel combs	2 combs for the Mupid™-One electrophoresis system

Mupid™-ONE LED Illuminator

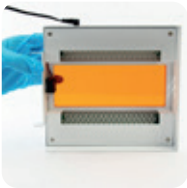
- **Follow the electrophoresis run live**
- **Safe Blue LED light**
- **Add-on for the Mupid™-One electrophoresis chamber**

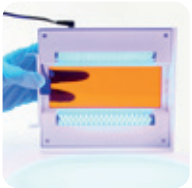
Visualize DNA during the run

The MUPID™-One LED Illuminator replaces the standard MUPID™-One lid, providing real-time visualization of DNA fragments during the electrophoresis process. It features an orange-colored filter that enables easy result checks without the need for goggles.

Blue LED light for a safe detection of DNA

The MUPID™-One LED Illuminator uses safe blue light with an emission peak at 470 nm, ideal for exciting nucleic acid stains like MIDORIGreen Xtra and SYBR® Safe. Without UV radiation, it offers a safe detection method that does not harm your DNA samples.



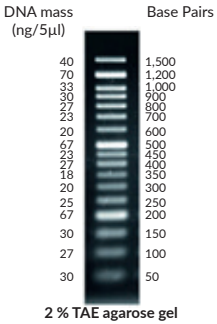


Ordering information

Cat. No.	Product	Content
MU4	Mupid™-One LED Illuminator	Mupid™-One LED Illuminator with black gel trays

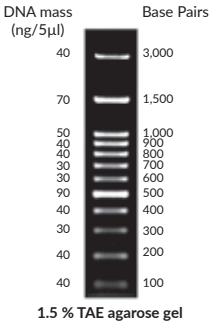
FastGene® DNA Markers

MWD50



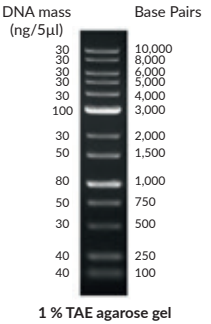
2 % TAE agarose gel

MWD100



1.5 % TAE agarose gel

MWD1P



1 % TAE agarose gel

- **Molecular weight markers for each application**
- **Sharp and well defined DNA bands**
- **Loading dye is included**

The right marker for every application

The FastGene® DNA Markers are designed for different applications:

- MWD50 is perfect for precise size estimation of small PCR products, ranging from 50 bp to 1,500 bp.
- MWD100 covers 12 fragments from 100 bp to 3,000 bp, ideal for small plasmids and larger PCR products.
- MWD1P is designed for very large fragments and plasmids, with sizes ranging from 100 bp to 10,000 bp.

SPECIFICATIONS			
Cat. No.	**MWD50**	**MWD100**	**MWD1P**
Description	50 bp Ladder	100 bp Ladder	1 kb Ladder
Range / bp	50 - 1,500	100 - 3,000	100 - 10,000
Number of bands	17	12	13
Reference bands	3 (200, 500, 1,200)	2 (500 & 1,500)	2 (1,000 & 3,000)
Loading dye	Orange G	Orange G & Xylene cyanol FF	Bromphenol blue
Content	56 µg in 500 µl	50 µg in 500 µl	50 µg in 500 µl
Recommended load	5 µl	5 µl	5 µl

High stability and easy tracking

FastGene® DNA Markers MWD100 and MWD1P offer excellent stability at room temperature, with the option for long-term storage at 4°C or -20°C. The included tracking dye allows for easy visualization of DNA movement, helping to determine the optimal electrophoresis stopping point. Additionally, the loading dye ensures smooth and accurate application to the agarose gel.

Ordering information

Cat. No.	Product	Content
MWD50	FastGene® 50 bp Standard DNA Marker	500 µl
MWD100	FastGene® 100 bp Standard DNA Marker	500 µl
MWD1P	FastGene® 1 kb Standard DNA Marker Plus	500 µl

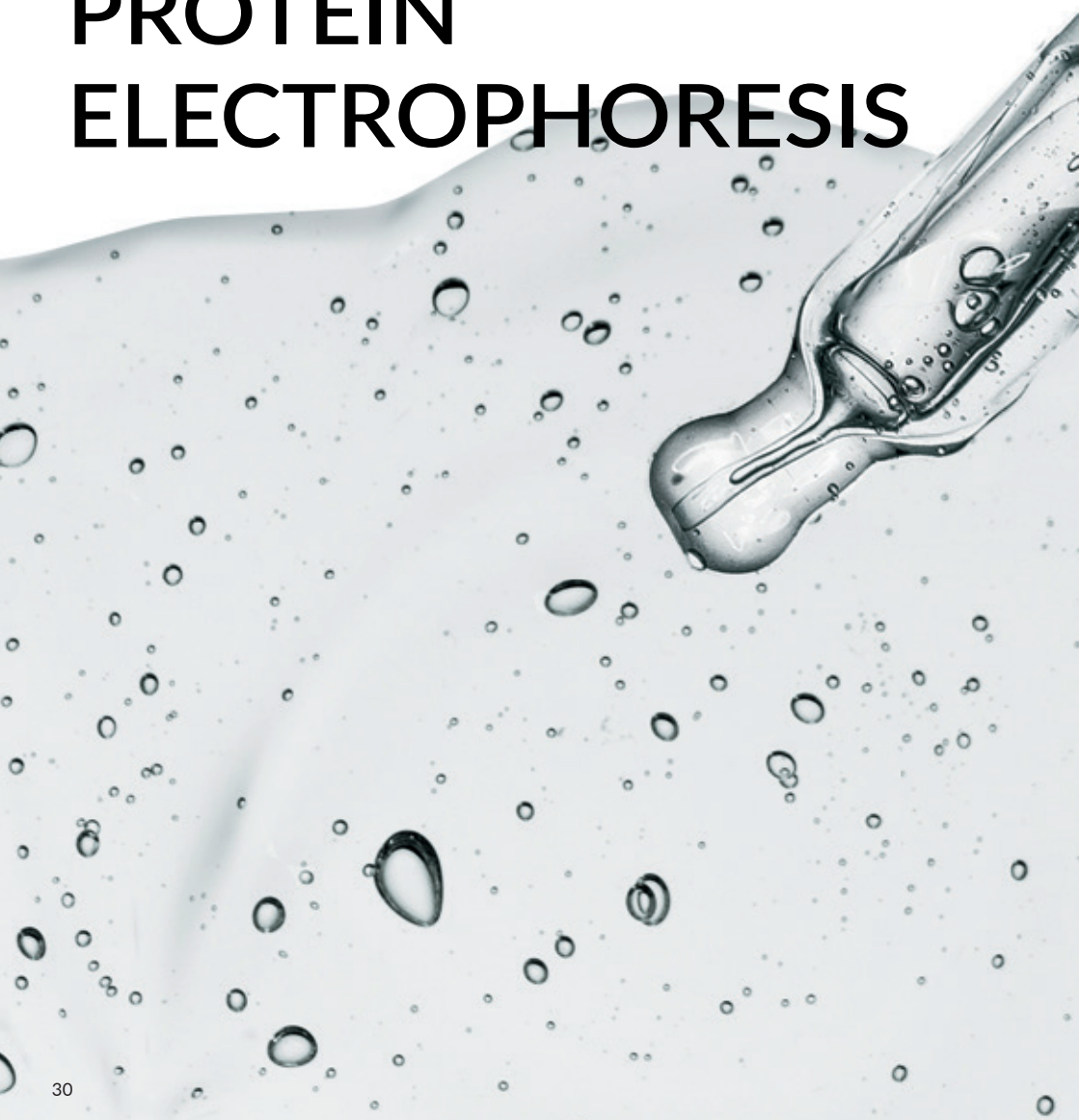
Want to try it?

Interested in testing our MIDORI[Green] dyes, agarose of DNA Markers? No problem! Just call or email us, and you'll have your it no time.

+49 2421 554960
info@nippongenetics.de

www.nippongenetics.eu

PROTEIN ELECTROPHORESIS



PAGE Protein System	32
Western Blot System	36
Precast PAGE Gels	38
PAGE Running Buffers	39
Q-Stain Protein Stain	40
Protein Marker	41
Western ECL Kit	42
Block & Go	43

FastGene® PAGE Protein System

- **Innovative locking system**
- **Hand-cast gel set included (1 mm gels)**
- **Compatible with different pre-cast gels**
- **Spare parts available**

Powerful protein analysis via PAGE

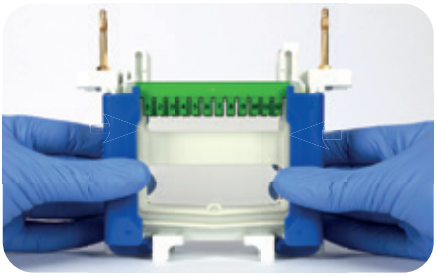
Polyacrylamide Gel Electrophoresis (PAGE) is a biochemical method to separate protein mixtures by size. Proteins migrate through a gel under an electric field, with smaller proteins moving faster for size-dependent separation.

FastGene® PAGE Protein System

Everything you need for PAGE protein separation in one system. The electrophoresis tank accommodates up to 4 gels, while the hand-casting set includes all essentials for gel casting. Practical accessories like a glass plate holder and tube holder are also included.

Innovative locking system prevents leakage

The FastGene® PAGE Protein System features robust locking mechanisms for secure sealing of precast gels or glass plates, preventing buffer or gel liquid leakage for safe and reliable operation.



Avoid buffer leakage with the robust, simple and secure closing mechanism for all PAGE and gel hand-casting components.

FastGene® PAGE Protein System

PAGE Protein System (PG01) content

FastGene® PAGE Protein System (PG01)	Qty
PAGE components	
Inner electrophoresis chamber with electrodes	1
Inner electrophoresis chamber without electrodes	1
U sealing strip long (10 cm x 10 cm) (e.g. ThermoFisher™ mini gels)	4
U sealing strip short for Bio-Rad TGX™ gels (10 cm x 8 cm)	4
U sealing strip FastGene® (10 cm x 8 cm)	4
Plastic dummy cassette short (10 cm x 8 cm)	1
Plastic dummy cassette long (10 cm x 10 cm)	1
Gel/Blot chamber lid with electrodes and power cable	1
Gel/Blot chamber tank	1
Gel shovels	5
Gel hand-casting components (1 mm gel)	
Comb 1 mm 10 wells	5
Comb 1 mm 15 wells	5
Glass spacer long 1 mm	5
Glass plates short	10
Gel casting base	4
Gel casting clip	4
Sealing gaskets	5
Accesories	
Glass plate holder	1
Tube holder	1

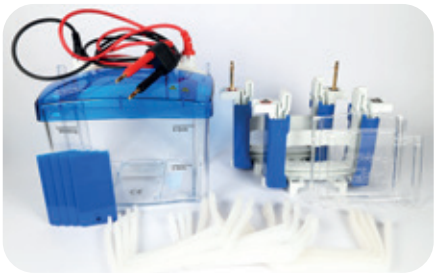
Complete and convenient PAGE components

The FastGene® PAGE Protein System includes everything needed for efficient protein electrophoresis. Three sealing strip types ensure compatibility with various precast gel brands. The robust gel hand-casting components allow easy handling and simultaneous pouring of up to 4 gels. Accessories like the glass plate holder and tube holder simplify daily workflows.

Broad gel compatibility

The FastGene® PAGE Protein System is compatible with a wide range of pre-cast gels (e.g. FastGene® gels, Bio-Rad TGX™ gels or ThermoFisher mini gels).

Three types of sealing strips are included in the set, allowing compatibility with different gel types and gel sizes.



FastGene® PAGE Protein System electrophoresis components.

FastGene® PAGE Protein System hand-casting components.

Accessories - glass plate holder and tube holder.

FastGene® PAGE Protein System

FastGene® PAGE Protein System: Complete Sets & Components

Order the complete system (PG01) with all PAGE components, gel-casting tools, and accessories. Additional comb and plate sets are available for gel thicknesses of 0.75 mm, 1 mm, and 1.5 mm. A dedicated gel-casting set and individual components are also sold separately.

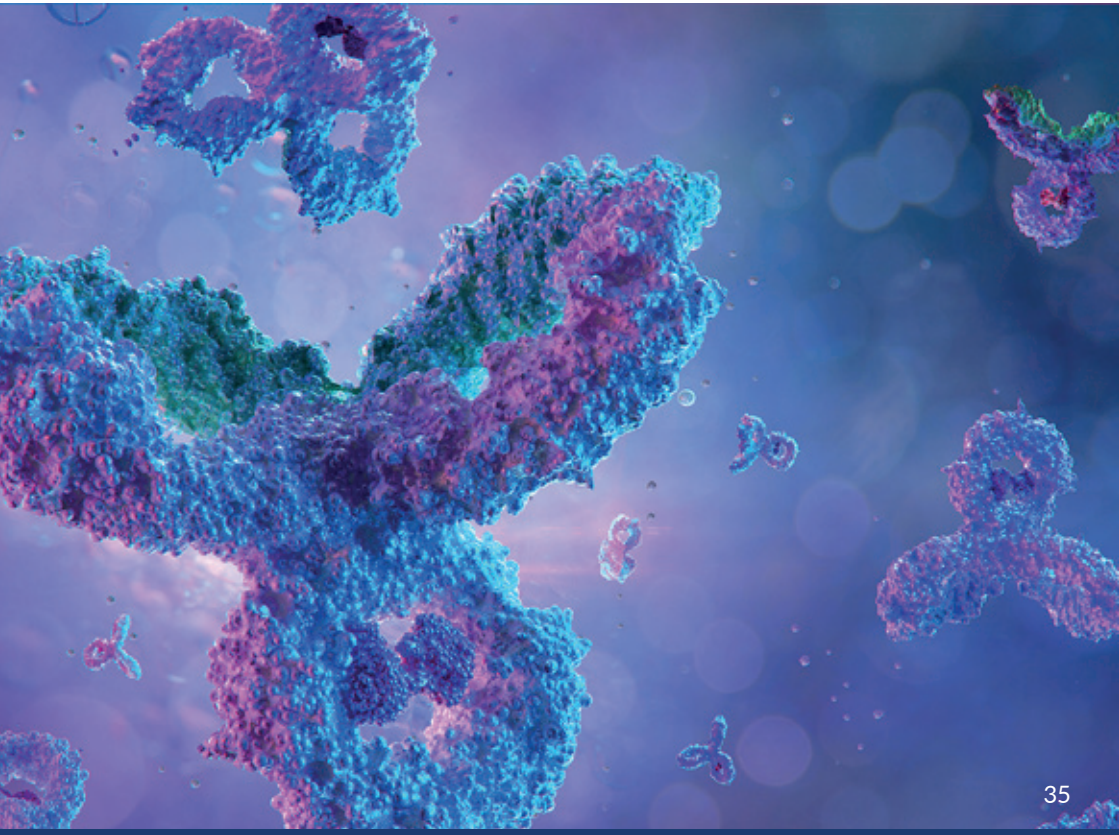
Ordering information

Cat. No.	Product	Content (quantity)
Complete System		
PG01	FastGene® PAGE Protein System	Complete protein PAGE system (see table on previous page for content and quantity)
Sets		
PG02	FastGene® Comb Set 075	Comb 0,75 mm 10 wells (5); Comb 0,75 mm 15 wells (5); Glass spacer long 0,75 mm (5); Glass spacer short (10)
PG03	FastGene® Comb Set 150	Comb 1,5 mm 10 wells (5); Comb 1,5 mm 15 wells (5); Glass spacer long 1,5 mm (5); Glass spacer short (10)
PG10	FastGene® Comb Set 100	Comb 1 mm 10 wells (5); Comb 1 mm 15 wells (5); Glass spacer long 1 mm (5); Glass spacer short (10)
PG06	FastGene® Casting stand set	Gel casting base (2); Gel casting clip (2); Sealing gaskets (5); Gel shovels (5)
Single Parts		
PG11	Inner electrophoresis chamber with electrodes (1)	
PG12	Inner electrophoresis chamber without electrodes (1)	
PG20	U sealing strip long (10 cm x 10 cm) (e.g. ThermoFisher™ mini gels) (4)	
PG18	U sealing strip short (for Bio-Rad TGX™ gels, 10 cm x 8 cm) (4)	
PG19	U sealing strip (for FastGene® Precast PAGE gels, 10 cm x 8 cm) (4)	
PG23	Plastic dummy cassette short (10 cm x 10 cm) (1)	
PG13	Plastic dummy cassette long (10 cm x 10 cm) (1)	
PG14	Gel/Blot chamber lid with electrodes and power cable (1)	
PG05	Gel/Blot chamber tank (1)	
PG17	Gel shovels (5)	
PG04	Short flat glass plates for hand-cast gels (10)	
PG21	Gel casting base (1)	
PG22	Gel casting clip (1)	
PG07	Sealing gaskets for gel casting (5)	
PG24	Glass plate holder (1)	
PG25	Tube holder (1)	

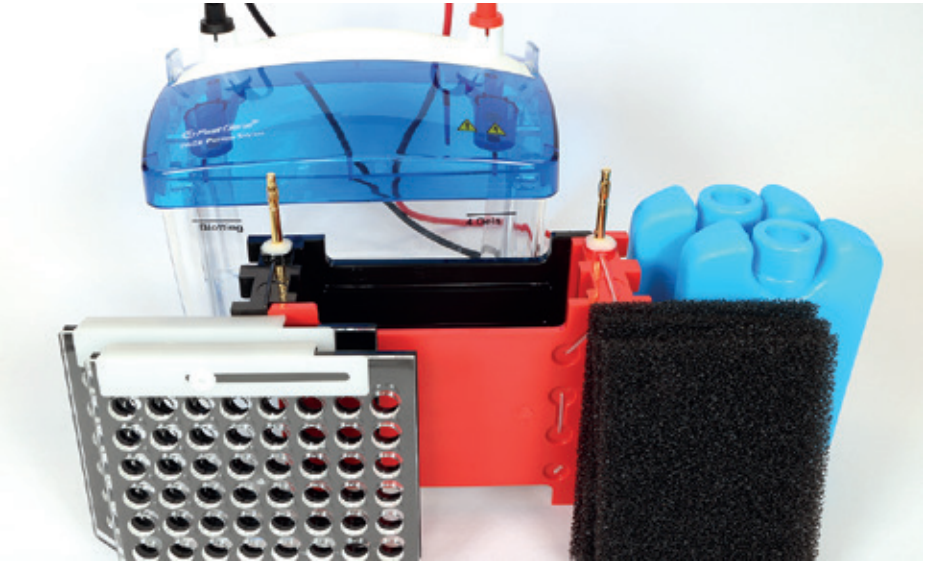
FastGene® PAGE Protein System

Ordering information

Single Parts	
PG27	Glass spacer long 0.75 mm (5)
PG28	Glass spacer long 1.0 mm (5)
PG29	Glass spacer long 1.5 mm (5)
PG30	Comb 0.75 mm 10 wells (5)
PG31	Comb 0.75 mm 15 wells (5)
PG32	Comb 1.0 mm 10 wells (5)
PG33	Comb 1.0 mm 15 wells (5)
PG34	Comb 1.5 mm 10 wells (5)
PG35	Comb 1.5 mm 15 wells (5)



FastGene® Western Blot System



- Efficient and reliable protein transfer
- Secure closing mechanism
- Run up to two blots simultanously
- Cooling pack for heat absorption

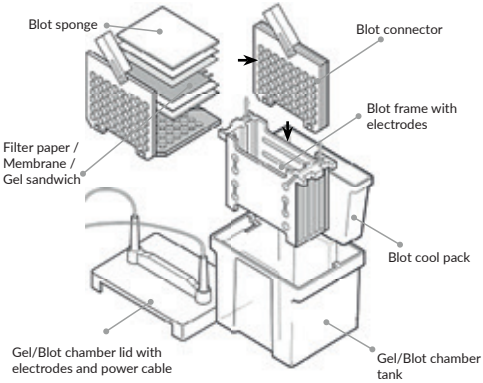
Biochemical protein analysis via blotting

Blotting of proteins is a powerful biochemical method for the detection of proteins. Protein bands that were separated by size after PAGE are transferred and immobilized on a carrier membrane. The firm binding of the proteins to the membrane allows a subsequent protein detection by choosing from a variety of staining or immunological methods.

Three steps of western blot analysis: 1. PAGE 2. Protein transfer 3. Immunologal detection

Wet-Transfer Western Blot System

Effortlessly transfer proteins from gel to membrane using the wet transfer technique. The system includes all essential components, detailed guidelines, and a cool pack to absorb heat and prevent power loss during runs. The easy-to-use lock mechanism simplifies assembly of the gel and membrane in the blot connector.

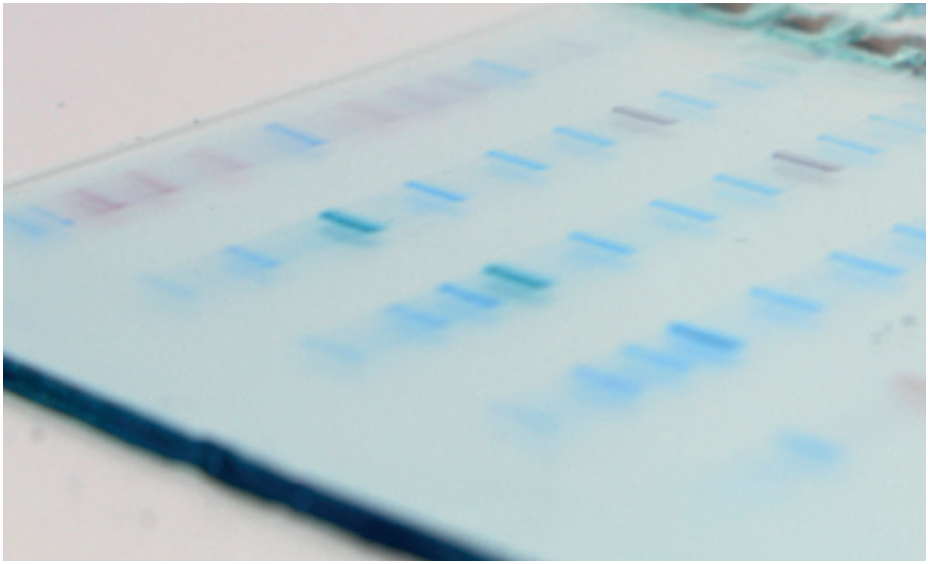


FastGene® Western Blot System

Ordering information

Cat. No.	Product	Content (quantity)
Complete System		
PG08	FastGene® Western Blot System	Blot frame with electrodes (1); Blot connector (2); Blot Sponge (5); Blot cool Pack (2); Gel/Blot chamber lid with electrodes and power cable (1); Gel/Blot chamber tank (1)
Sets		
PG09	FastGene® Western Blot Components	Blot frame with electrodes (1); Blot connector (2); Blot Sponge (5); Blot cool Pack (2)
Single Parts		
PG15	Blot connector (2)	
PG16	Blot sponge (5)	
PG26	Blot Cool Pack (2)	
PG14	Gel/Blot chamber lid with electrodes and power cable (1)	
PG05	Gel/Blot chamber tank (1)	

FastGene® Precast PAGE Gels



- 8 cm x 10 cm PAGE Gels
- Homogenous and gradient gels
- No special buffers required
- Superior protein band resolution and stability

Each box of our FastGene® Precast Protein Gels comes with 10 gels, a cassette opener and spacers. The gels are perfecly compatible with our MOPS buffer packs.

Get the best PAGE separation

Casting hand-cast gels for protein separation can be time-consuming and error-prone. FastGene® Precast PAGE Gels are the perfect replacement and make laboratory work a lot easier. Due to the very consistent gel casting process, the FastGene® PAGE Gels have a very high reproducibility.

Homogenous or gradient PAGE gels

FastGene® Precast Protein Gels are available in a variety of homogenous and gradient gels. They can be used for denaturing SDS-PAGE as well as native gel electrophoresis, depending on the used running buffer. Our gels are compatible with MOPS or MES buffers.

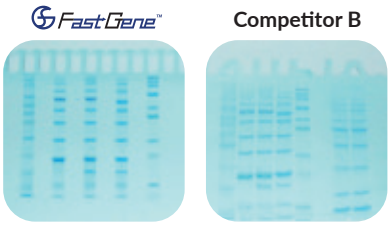
Superior running performance

FastGene® Precast PAGE Gels are cast at a neutral pH. The hydrolysis of polyacrylamide is reduced, resulting in an increased gel stability and superior band resolution. Further advantages are optimised running performance and a larger loading volume (up to 60 µl). The extra large wells also prevent a lane-to-lane overflow and ensure a higher transfer efficiency.

FastGene® Precast PAGE Gels

New quality standards

The FastGene® Precast PAGE Gels have a revolutionary high performance. The unique buffer formulation that maintains a low operating pH during the electrophoresis eliminates the "smilies" and poor resolution of self-made gels and many competitor precast gels.



Direct comparison of a FastGene® Precast Protein Gel (12%) with a common competitor gel manufacturer.

Get a sample for free

You would like to test our Precast PAGE Gels? All gels are available as a sample with all necessary components for protein electrophoresis, including MOPS buffer. Just contact us, and get a free sample.

Compatibility

The gels are compatible with the FastGene® PAGE Protein System as well as electrophoresis gel tanks from other manufacturers like Bio-Rad™.

Manufacturer	Electrophoresis system (8 cm x 10 cm)
NGE	FastGene® PAGE Protein System
BioRad™	Mini PROTEAN II & 3 Mini PROTEAN Tetra System
Hoefer	SE 250 Mighty Small II SE260 Mighty Small II Deluxe

Ordering information

Cat. No.	Product	Content
PG-S012	FastGene® PAGE Gel 8 cm x 10 cm - 12%	10 gels
PG-S412	FastGene® PAGE Gel 8 cm x 10 cm - 4-12%	10 gels
PG-S420	FastGene® PAGE Gel 8 cm x 10 cm - 4-20%	10 gels
PG-S816	FastGene® PAGE Gel 8 cm x 10 cm - 8-16%	10 gels

PAGE Running Buffers

All you need for perfect PAGE

The running buffer is available as a 10x ready solution or as a measured powder for making 1 L of buffer. This eliminates the tedious weighing of SDS and other buffer components. FastGene® MOPS Buffer Pouches are compatible with our FastGene® Precast PAGE Gels.

PG-MOPS10

ID1501

Ordering information

Cat. No.	Product	Content
PG-MOPS10	FastGene® MOPS Buffer Pouches	10 pouches for 1 L each
ID1501	Running Buffer Tris-Glycine-SDS	10x 500 ml

FastGene® Q-Stain Protein Stain

Simplicity meets clarity

FastGene® Q-Stain is a one-step, modified Coomassie Blue stain for polyacrylamide gels. No fixing, washing, or destaining required—simply add Q-Stain after running your gel and see bands appear in seconds. It leaves a crystal-clear background with sharp protein bands and is water-based, free of methanol and acetic acid.

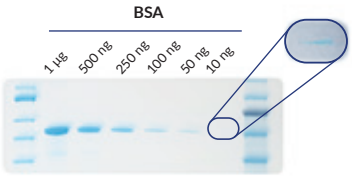
Quick and reliable protein staining

Achieve protein band visibility in under 10 minutes with the FastGene® Q-Stain. Simply remove the gel after electrophoresis, add the FastGene® Q-Stain, and watch your protein bands appear with ease. Detect proteins as low as 10 ng with extended staining. This efficient, safe staining solution streamlines protein detection in polyacrylamide gels.

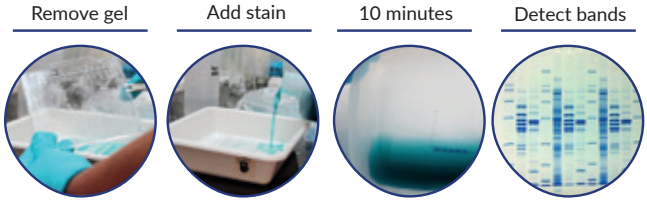
Ideal for mass spectrometry

The FastGene® Q-Stain is fully compatible with mass spectrometry. To analyze your protein, incubate the excised protein band in 1 ml of 30% ethanol or 30% acetone for 30 minutes at room temperature. Repeat this process until the stain is completely removed, then continue with your standard mass spectrometry protocol.

- Protein staining in 10 minutes
- No washing, fixing or destaining
- High sensitivity - 10 ng bands detectable
- Free of methanol and acetic acid



Detection of 10 ng of protein after 30 minutes incubation. For a better visualisation, the 10 ng protein band is shown with a stronger contrast.

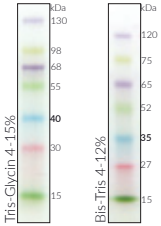


Ordering information

Cat. No.	Product	Content
FG-QS1	FastGene® Q-Stain	1 liter

FastGene® Prestained Protein Marker (15-130 kDa)

MWP01



The FastGene® Prestained Protein Marker is a five colour protein standard with 7 prestained proteins. It covers a range from 15 to 130 kDa.

- 7 sharp bands with 5 distinct colours
- Ready-to-use with loading buffer
- Pattern covers housekeeping proteins

Bright and precise protein marker

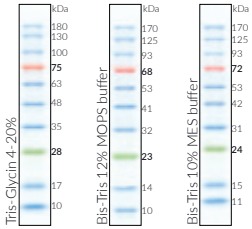
The FastGene® Prestained Protein Marker (15–130 kDa) simplifies protein analysis with five distinct colors for effortless size recognition. It ensures precise molecular weight identification on SDS-PAGE gels and Western Blot membranes.

Ordering information

Cat. No.	Product	Content
MWP01	FastGene® Prestained Protein Marker (15-130 kDa)	500 µl

Protein Markers

BlueStar (MWP03)

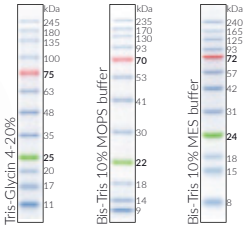


The BlueStar Prestained Protein Marker is a three colour protein standard with 10 prestained protein. It covers a range from 10 to 180 kDa.

Excellent accuracy

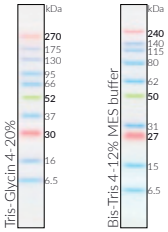
Our Protein Markers offer three options with distinct colors and size ranges, all supplied in a ready-to-use loading buffer. These markers provide sharp bands with outstanding accuracy, ideal for monitoring protein separation in SDS-PAGE, verifying Western blot transfer efficiency on PVDF, nylon, or nitrocellulose membranes.

BlueStar PLUS (MWP04)



The BlueStar PLUS is a three colour protein standard with 12 prestained proteins. It covers a range from 10 to 245 kDa.

BlueEasy (MWP06)



The BlueEasy Prestained Protein Marker is a three colour protein standard with 10 prestained proteins. It covers a range from 6.5 to 270 kDa.

Ordering information

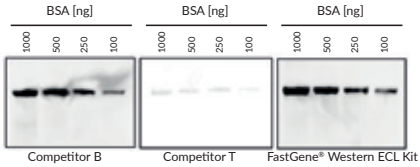
Cat. No.	Product	Content
MWP03	BlueStar Prestained Protein Marker	500 µl
MWP04	BlueStar PLUS Prestained Protein Marker	500 µl
MWP06	BlueEasy Prestained Protein Marker	500 µl

FastGene® Western ECL Kit

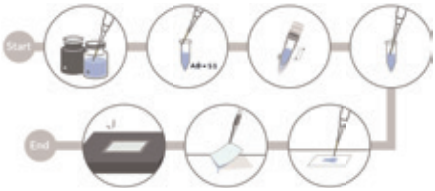
- **Highly sensitive western blot detection**
- **Fast and easy protocol**
- **For HRP-conjugated antibodies**

Chemiluminescent western blot detection

The FastGene® Western ECL Kit is a luminol-based enhanced chemiluminescent substrate designed for sensitive immunoblotting with HRP-conjugated secondary antibodies. Its high substrate sensitivity and long signal duration allow detection of low-concentration antigens, making both digital and film-based imaging possible without signal loss.



Comparison between the FastGene® Western ECL Kit and 2 competitor products. All kits were used under the same experimental workflow. 1000 - 100 ng BSA were separated in a 4-20% SDS-PAGE (FastGene® Precast Gel). The exposure time was set to 10 sec.



FastGene® Western ECL Kit workflow. The luminol and peroxide solutions from the FastGene® Western ECL Kit are mixed in a 1:1 ratio and thoroughly agitated to prepare 0.1 ml of substrate solution per cm^2 of membrane. The membrane is placed protein-side up and then removed from the chemiluminescent substrate solution. An image of the membrane is captured using a chemiluminescence detector

Ordering information

Cat. No.	Product	Content
FG-CH01	FastGene® Western ECL Kit	50 ml Solution A, 50 ml Solution B

FastGene® Block & Go

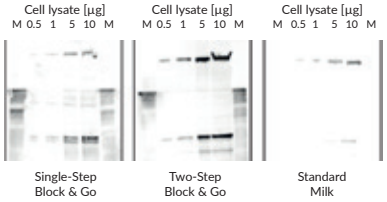
- **Blocking reagent and signal enhancer**
- **Saves time compared to standard protocol**
- **Reduces background and non-specific signals**

Boost your western blot

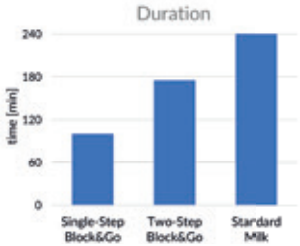
The FastGene® Block & Go is a protein-free blocking solution for Western blot analysis, additionally enhancing band intensity when developed with HRP (horseradish peroxidase) or AP (alkaline phosphatase) substrates. It provides a sensitive method to detect specific protein bands in as low as 0.5 µg of whole-cell protein lysate.

Save Time and Sample with Block & Go

FastGene® Block & Go accelerates western blot development. It can be used in a single-step or two-step protocol. The single-step method combines membrane blocking, primary antibody, and secondary antibody incubation, reducing development time by more than half compared to conventional protocols.



Western blots with 2 min exposure time comparing two FastGene® Block & Go protocols and the conventional standard method using dried milk. FastGene® Block & Go provides a sensitive method for detection of specific protein expression using as low as 0.5 µg whole-cell lysate.

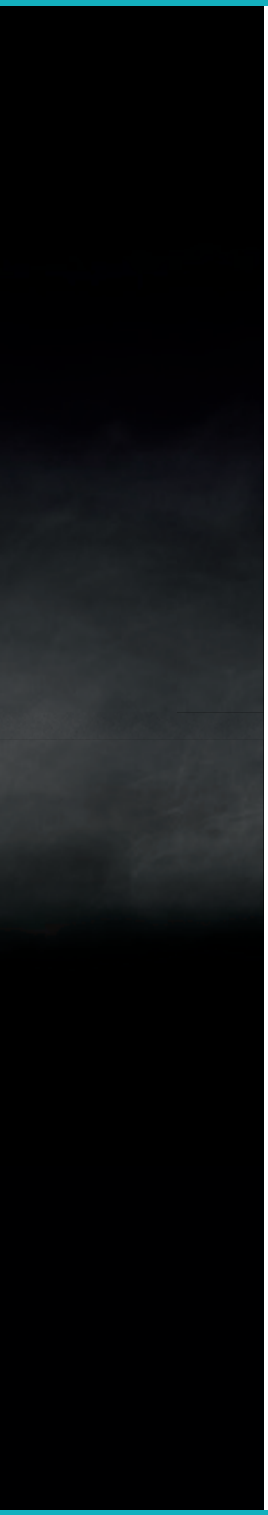


The use of FastGene® Block & Go can save up to 2:20 h (single-step protocol) and a minimum of 1 h (two-step protocol) compared to the standard blocking procedure with dried milk.

Ordering information

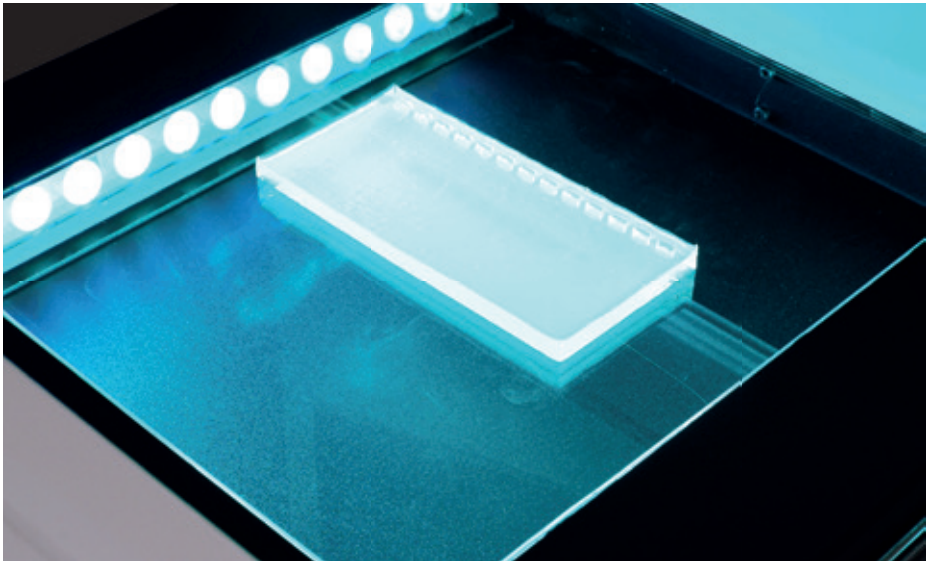
Cat. No.	Product	Content
FG-CH05	FastGene® Block & Go	500 ml solution

GEL DOCUMENTATION



Blue/Green LED Technology	46
Gel Documentation Systems Overview	49
FAS-X	50
FAS-DIGI PRO	52
FAS-DIGI Compact	54
FAS-BG LED BOX	56
Transilluminators	58

Blue/Green LED Technology



What is Blue/Green LED light?

Blue/Green LED light is powerful excitation light and part of all FastGene® Gel Documentation Systems. It is a unique light source, not with a single wavelength, but with a spectral range between 470 nm – 520 nm. This light source is used to excite nucleic acid stains and make them visible and detectable in a gel.

What makes Blue/Green LEDs so unique?

1. Blue/Green LEDs are completely safe.

While traditional UV transilluminators remain common, they pose risks such as DNA damage and user harm. UV light is highly energetic and can cause DNA strand breaks, mutations, and thymine dimers, compromising DNA quality and making it unsuitable for cloning, sequencing, and other applications. Degraded sample integrity can lead to failed experiments or unreliable results.

Cloning efficiency of DNA irradiated with **UV light.**

0 sec 30 sec 60 sec

Bacteria were transformed with DNA fragments coding for antibiotic resistance and plated on antibiotic-containing agar plates. Before transformation, the DNA fragments were exposed to UV light for varying durations (0 to 60 seconds). A significant reduction in bacterial colonies was observed after just 30 seconds of UV exposure, indicating substantial DNA damage.

Blue/Green LED Technology

Blue/Green LED Technology emmits light in the safe 470 nm - 520 nm range. This spectrum eliminates the risks associated with UV light exposure of common transilluminators.

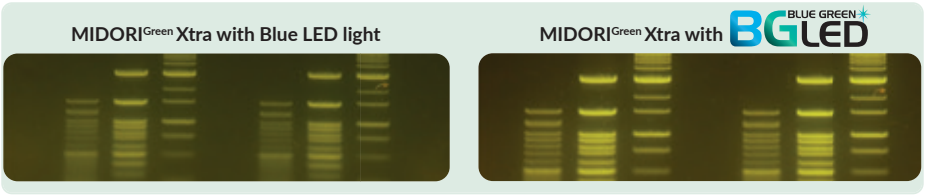
Cloning efficiency of DNA irradiated with **Blue/Green LEDs.**

Bacteria were transformed with DNA fragments coding for antibiotic resistance and plated on antibiotic-containing agar plates. Before transformation, the DNA fragments were exposed to Blue/Green LED light (0 to 60 seconds). No reduction in bacterial colonies was observed, indicating the complete safety of Blue/Green LED light exposure to the DNA fragments.

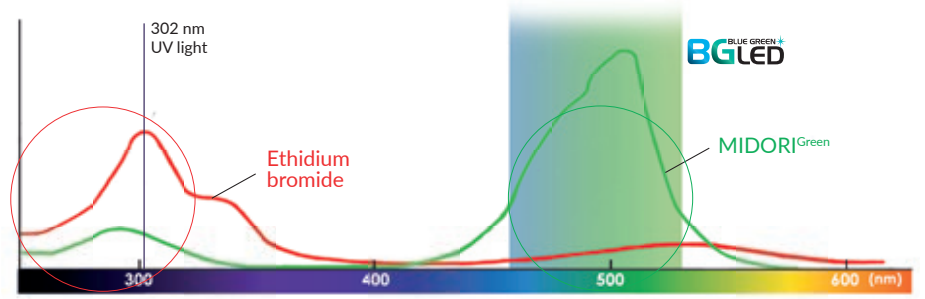
2. Blue/Green LEDs show incredible sensitivity.

Common Blue LED transilluminators, operating only at a single wavelength of 470 nm, also present challenges. Their inefficient excitation of a wide range of DNA dyes results in poor visualization and unsatisfactory imaging quality. This lack of sensitivity with various fluorescent dyes forces researchers to use multiple devices, complicating workflows and increasing costs.

In contrast, high-intensity Blue/Green LED light, with a broad spectral range between 470 nm – 520 nm ensures superior excitation of various dyes, resulting in brighter and clearer images.



This example demonstrates the superior excitation of MIDORI Green Xtra by Blue/Green LED light. The enhanced spectrum (470-520 nm) allows more light energy to be absorbed by the dye, resulting in a more sensitive signal and clearer results.



The exceptional excitation efficiency of Blue/Green LED technology comes from its broad spectrum of 470–520 nm, which accumulates and delivers high energy across this range. This allows different nucleic acid dyes (green, red and yellow) to absorb a significant amount of energy, ensuring strong fluorescence. Even ethidium bromide, a red dye with peak absorption in the UV range, is effectively excited by Blue/Green light, providing highly sensitive detection without the risks associated with UV exposure.

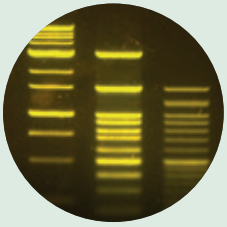
Blue/Green LED Technology

3. Blue/Green LEDs can excite a wide range of fluorescent dyes.

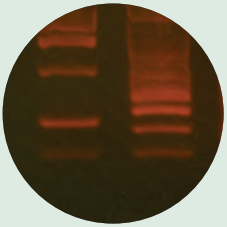
Blue/Green LED technology offers superior excitation across a broad spectrum of 470–520 nm, making it highly effective for a wide range of fluorescent dyes. Unlike single-wavelength Blue LEDs, this broad range ensures that green, red and yellow nucleic acid dyes absorb energy with maximum efficiency, resulting in high-intensity fluorescence.

Not only nucleic acid dyes, but also fluorescent protein dyes can be efficiently excited with Blue/Green LED technology. This extends the application of the system beyond DNA and RNA visualization, making it a powerful tool for protein analysis as well.

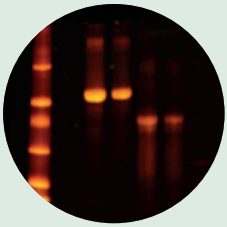
Fluorescent dyes



MIDORI[Green] Xtra DNA stain



GelRed® DNA stain

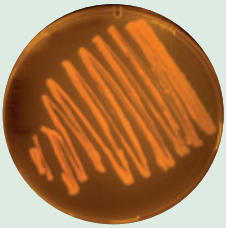


SERVA Lightning Red protein stain

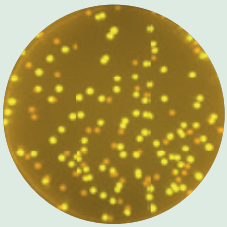
By enabling the detection of fluorescent proteins, Blue/Green LED technology enhances flexibility for molecular biology and biochemistry research. It efficiently excites proteins like GFP, mCherry, YFP, and RFP, making it ideal for visualizing fluorescent bacterial colonies. The safe excitation light allows researchers to examine living organisms without harm, ensuring bright, clear visualizations for more accurate and efficient workflows.

Fluorescent proteins

GFP



mCherry



YFP & RFP

We have sold over 3000 systems with Blue/green LEDs worldwide. With outstanding customer satisfaction.

FastGene® Gel Documentation Systems Overview

Our Systems with Blue/Green LED light

All FastGene® Gel Documentation Systems use Blue/Green LED technology for unmatched safety, versatility, and sensitivity, ensuring high-quality and reliable results. With a range of options available, researchers can choose the system that best fits their needs—from high-end models offering superior usability and performance to compact, space-saving solutions for smaller labs.

BG BLUE GREEN LED

	FAS-X *(GP-FAS-X)*	FAS-DIGI PRO *(GP-07LED)*	FAS-DIGI Compact *(GP-08LED)*	FAS-BG LED BOX *(GP-04LED)*
Safe Blue/Green LED light	●	●	●	●
Detection of green DNA dyes	●	●	●	●
Detection of red DNA dyes	●	●	●	●
White light imaging	●	●	○	●
High resolution camera	●	●	●	○
Parfocal lens	●	○	○	○
Software included	●	●	○	●
Networkable	●	●	○	○
Stand-alone system	●	◐*	●	●
Large illuminated area	●	●	●	○
Quantification of DNA and RNA	●	●	○	○
CE certification	●	●	●	●

* Operation also possible without computer

FastGene® FAS-X

- **Large 13" full HD touchscreen**
- **High-resolution 20 MP camera**
- **Huge Blue/Green LEDs transillumiantor**
- **Intuitive interface and post-modification tools**

A powerful and compact Imaging system

The FastGene® FAS-X is a stand-alone system that combines high performance with a compact design, making it a perfect fit for any lab. Despite its small size, it delivers powerful imaging capabilities, ensuring reliable, high-quality results for your research.

German innovation, global impact

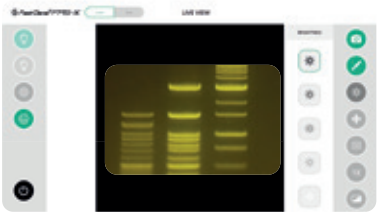
Manufactured in Germany and shipped worldwide from Düren, the FastGene® FAS-X embodies cutting-edge design and safety. Featuring Blue/Green LED technology, it ensures reliable performance while prioritizing user safety. Its excellence has been recognized with the German Innovation Award 2024 and the German Design Award 2025, making it a standout choice for any lab.

High-resolution imaging with Blue/Green

The system features the largest Blue/Green LED transilluminator on the market (21 cm x 26 cm), accommodating gels of any size. Its 20 MP color camera captures high-resolution images with exceptional clarity, making it easy to select your area of interest. A front-facing status LED indicates the system's mode—Blue/Green LED or White Epi light—adding both functionality and a sleek visual touch to your lab

Effortless operation with intuitive software

The system was designed for simplicity and efficiency. Its large 13-inch high-resolution touchscreen makes operation seamless, while the intuitive software allows you to capture stunning gel images with just a few taps. With ease of use at its core, this system lets you focus on your research, not on complicated settings.



The software allows you to control every step with ease, ensuring smooth operation and high-quality results with minimal effort.

Enhance and annotate with precision

With powerful post-modification tools, the FAS-X allows you to add band annotations, insert arrows, lines, or boxes directly onto your gel images. This makes it easy to highlight important results and document your findings with precision—right on the spot.

Amber Filter Shield for easy band cutting

The Amber Board for FAS-X is a useful accessory for cutting gel bands. It attaches easily to the drawer of the FAS-X with magnets, providing complete coverage for the Blue/Green Transilluminator. The shield offers plenty of space for your hand, ensuring safe and convenient cutting of gel bands.

The Amber Board for FAS-X provides complete coverage of the Blue/Green transilluminator, offering ample space for your hands to easily cut gel bands.

SPECIFICATIONS		
High-quality material	✓	Coated aluminium metal
Screen	✓	Inbuild 13.3" touchscreen with 1920 x 1080 resolution
Software	✓	Stand-alone system with integrated FAS-X imaging software
Camera	✓	20 MPixel (5472 x 3648 resolution), colour, digital zoom and CMOS sensor
Safe Blue/Green LED light	✓	Blue/Green light spectrum from 470 nm to 520 nm
Huge transilluminator	✓	View area: 26 cm x 21 cm
White light sources	✓	White LED transilluminator, EPI room light
Connectivity	✓	LAN, 3x USB 3.0 slots, networkable
Image saving format	✓	JPEG, TIFF, PNG, BMP
Compact design	✓	Dimensions (H x D x W): 53.2 cm x 44.3 cm x 37.5 cm; Weight: 20 kg
Printer connection	✓	Supported printers: Sony UP-X898MD, Sony UP-D897

Ordering information

Cat. No.	Product	Content
GP-FAS-X	FastGene® FAS-X	FAS-X Gel Documentation System with Blue/Green LED transilluminator, touchscreen with imaging software and high-resolution camera
FAS-DGOF3	Amber Board for FAS-X	Amber Board for FAS-X with magnetic holder for cutting out gel bands

FastGene® FAS-DIGI PRO

- intuitive PC control software
- Scientific grade camera
- Huge Blue/Green LEDs transillumiantor
- White light plate included

FAS-DIGI PRO Gel Imaging System

The FastGene® FAS-DIGI PRO is a high-performance gel imaging system equipped with a large Blue/Green LED transilluminator, ideal for sensitive detection of red, green, or yellow nucleic acid stains. The system includes intuitive PC control software, allowing easy and precise operation of the scientific-grade camera. Images can be directly saved to the computer or network, ensuring efficient data management and high-quality results.

High-quality gel imaging

Achieve the highest image quality for agarose gel documentation with a 24 MPixel camera featuring a large APS-C CMOS sensor. This sensor operates noise-free from ISO 100 to ISO 1600, allowing the detection of even the faintest light signals in gels. With an adjustable exposure time from 1/4000 sec to 30 sec and a 3x zoom (18 mm to 55 mm focal length), you can perfectly enlarge the area of interest for detailed analysis.

Safe detection with Blue/Green LEDs

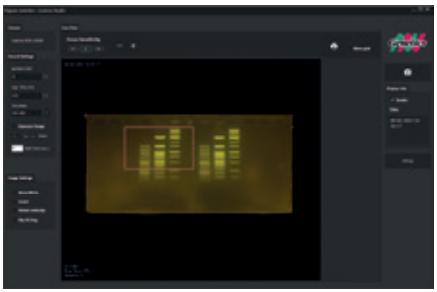
The system features a powerful transilluminator equipped with unique Blue/Green LED technology. Emitting light in the 470–520 nm wavelength range, this system ensures safe detection of nucleic acids without causing damage. The Blue/Green LED light is compatible with all common green dyes like MIDORIGreen or SYBR® Green, yellow dyes such as SYBR® Safe, and red dyes like ethidium bromide or GelRed®, enabling versatile and reliable nucleic acid visualization.

The FAS-DIGI PRO also includes an innovative imaging software. Full camera control and focus adjustment allows you to capture gel images of the highest quality.

FastGene® FAS-DIGI PRO

Easy-to-use control imaging software

The FastGene® FAS-DIGI PRO comes with the intuitive NIPPON Genetics Camera Studio software, allowing seamless control of all camera parameters to analyze and optimize gel images. Key settings such as aperture, exposure time, sensitivity, and focus ensure the highest quality images for DNA gels. With mouse-driven controls, image optimization is just a click away. Images can be saved in TIFF or JPEG formats and printed directly using a printer connected to your PC.



Amber filter shield included

An amber filter shield can be easily inserted into the hood of the FAS-DIGI PRO using magnets. This filter helps visualize DNA bands by blocking the Blue/Green excitation light, making it easier to cut out DNA bands from the gel. The Blue/Green transilluminator has an area of 21 cm x 26 cm, providing ample space for sample visualization.

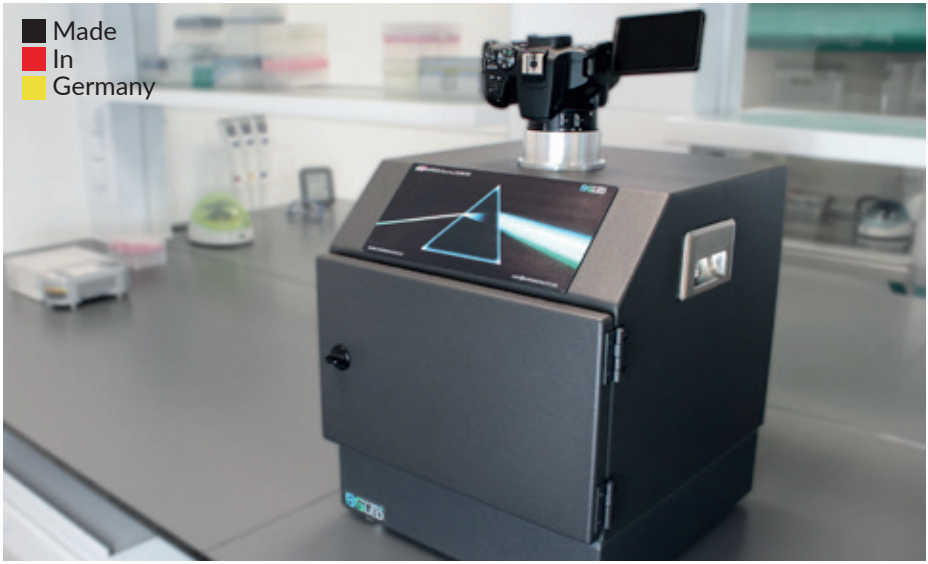
Use the included amber shield to cut out DNA bands.

SPECIFICATIONS		
Safe Blue/Green LED light	✔	Blue/Green light spectrum from 470 nm to 520 nm No risk of damaging DNA or harming your skin and eyes
Scientific grade camera	✔	24 MPixel (Resolution: 6000 x 4000), APS-C sensor, F/4-5.6 aperture, 18-55 mm zoom lens, 0.00025 to 30 seconds exposure time
High-quality material	✔	Coated aluminium metal
White light source	✔	White LED transilluminator: Documentation of protein gels
Imaging software	✔	NIPPON Genetics Camera Studio, Windows 10, Saved image format TIFF and JPEG
Huge transilluminator	✔	Illumination area: 26 cm x 21 cm
Integrated power supply	✔	100-240 V~, 50/60 Hz
Compact design	✔	Dimensions (H x D x W): 57 cm x 35 cm x 32.5 cm; Weight: 14 kg

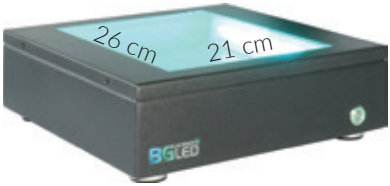
Ordering information

Cat. No.	Product	Content
GP-07LED	FastGene® FAS-DIGI PRO	LED imaging box, Blue/Green LED transilluminator, imaging software, high resolution camera, White LED transilluminator, Magnetic amber filter shield, Magnetic amber filter for the camera lens

FastGene® FAS-DIGI Compact



- **Compact system**
- **Scientific grade camera**
- **Huge Blue/Green LEDs transillumiantor**



The FAS-DIGI Compact comes with a huge Blue/Green LED transillumianor (26 cm x 21 cm), giving you a large illuminated area for any gel size.

A Compact, Stand-Alone Solution

The FastGene® FAS-DIGI Compact is a smaller, more compact version of the FAS-DIGI PRO. It operates directly using the scientific-grade camera mounted on top of the dark hood, without the need for PC software. This makes it the ideal solution for labs with limited benchtop space that require a stand-alone system. The modular design allows the dark hood and camera to be easily detached from the large Blue/Green LED transilluminator (21 cm x 26 cm) for flexible use.

The FAS-DIGI Compact is equipped with a high resolution scientific grade camera.

High-quality gel imaging

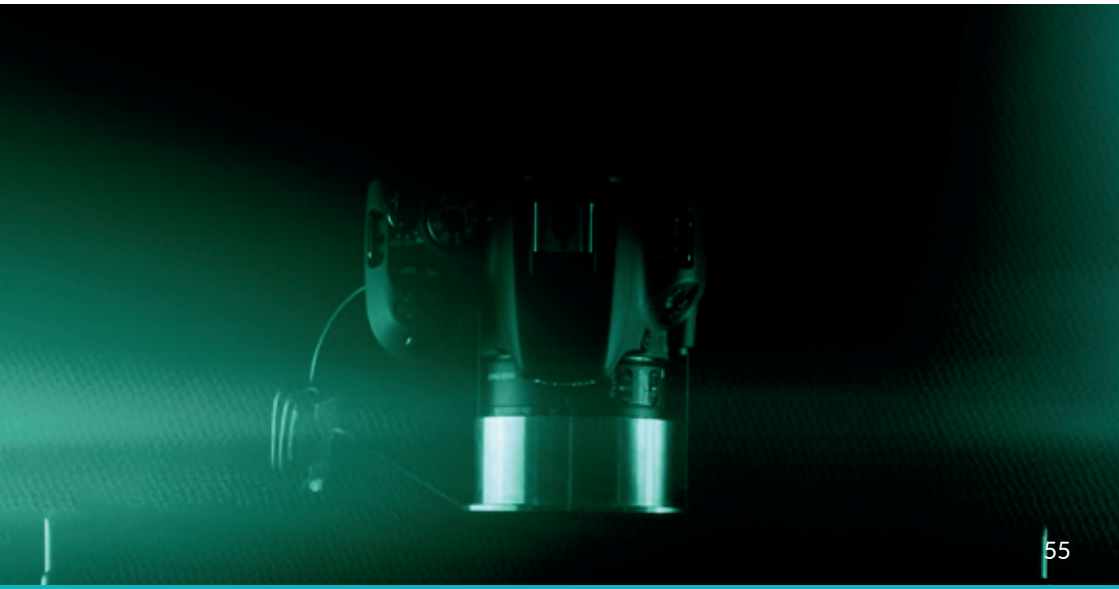
Achieve the highest image quality for agarose gel documentation with a 24 MPixel camera featuring a large APS-C CMOS sensor. This sensor operates noise-free from ISO 100 to ISO 1600, allowing the detection of even the faintest light signals in gels. With an adjustable exposure time from 1/4000 sec to 30 sec and a 3x zoom (18 mm to 55 mm focal length), you can perfectly enlarge the area of interest for detailed analysis.

FastGene® FAS-DIGI Compact

SPECIFICATIONS		
Safe Blue/Green LED light	✓	Blue/Green light spectrum from 470 nm to 520 nm No risk of damaging DNA or harming your skin and eyes
Scientific grade camera	✓	24 MPixel (Resolution: 6000 x 4000), APS-C sensor, F/4-5.6 aperture, 18-55 mm zoom lens, 0.00025 to 30 seconds exposure time
High-quality material	✓	Coated aluminium metal
Huge transilluminator	✓	Illumination area: 26 cm x 21 cm
Viewing window	✓	Amber filter window
Very compact design	✓	Dimensions (H x D x W): 50 cm x 35 cm x 32.5 cm; Weight: 7.4 kg
Upgradable	✓	Upgradable with the FAS-DIGI PRO dark box
Integrated power supply	✓	100-240 V~, 50/60 Hz

Ordering information

Cat. No.	Product	Content
GP-08LED	FastGene® FAS-DIGI Compact	LED imaging box with amber filter window, B/G transilluminator, high resolution camera



FastGene® FAS-BG LED BOX

- **Stand-alone system with very compact footprint**
- **Documentation of protein gels, membranes and petri dishes**
- **High resolution camera with 8 MPixel**

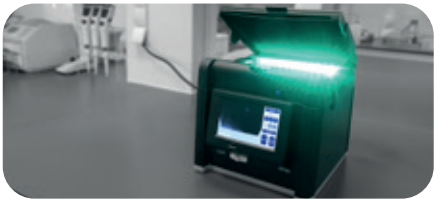
Compact imaging system with Blue/Green LED

The FastGene® FAS-BG LED BOX combines the benefits of Blue/Green LED technology with a compact design. This system makes detecting all red and green DNA dyes easy, offering reliable and high-quality results in a space-saving format.

Two types of white light are used for documentation of protein gels, western blots or petri dishes.

One imaging system - multiple applications

The Blue/Green LED technology enables the detection of DNA with exceptional sensitivity while ensuring safety for your eyes, skin, and samples. The white LED array allows for imaging of protein gels stained with Coomassie or silver staining. Additionally, the white LED epi-illumination supports the documentation of opaque surfaces, such as Petri dishes or membranes, offering versatility in your imaging needs.



The stand-alone system with a very compact footprint fits in every lab.

FastGene® FAS-BG LED BOX

C. Münch
Institute of Biochemistry II
Goethe University Frankfurt, Germany

"We use the FAS-BG LED BOX for half a year and are very satisfied. Our main application is the study of DNA in agarose gels (without ethidium bromide), which is performed very well by the box. The box is small, easy to handle and produces high quality images without using harmful UV radiation.."

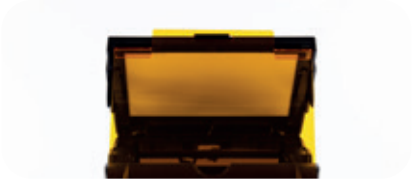
Easy connection to a monitor or PC

The FAS-BG LED BOX features a 5" touchscreen display, allowing you to view images in high quality and navigate the system with ease through an intuitive touch interface. It includes two USB ports (one front, one back) and an HDMI port, making it simple to connect an external (touch) monitor to view your gel images on a larger screen.

The large touch screen display and inbuild software allow easy navigation and image capturing. View gel images on a larger external (touch) monitor via the HDMI-port.

Excise your DNA fragments without effort

With the FastGene® FAS-BG LED BOX and our MIDORIGreen dyes, excising DNA fragments from gels is made simple. Just attach the included amber filter shield to the lid, and you can easily obtain perfect signals with ethidium bromide or other red DNA dyes.



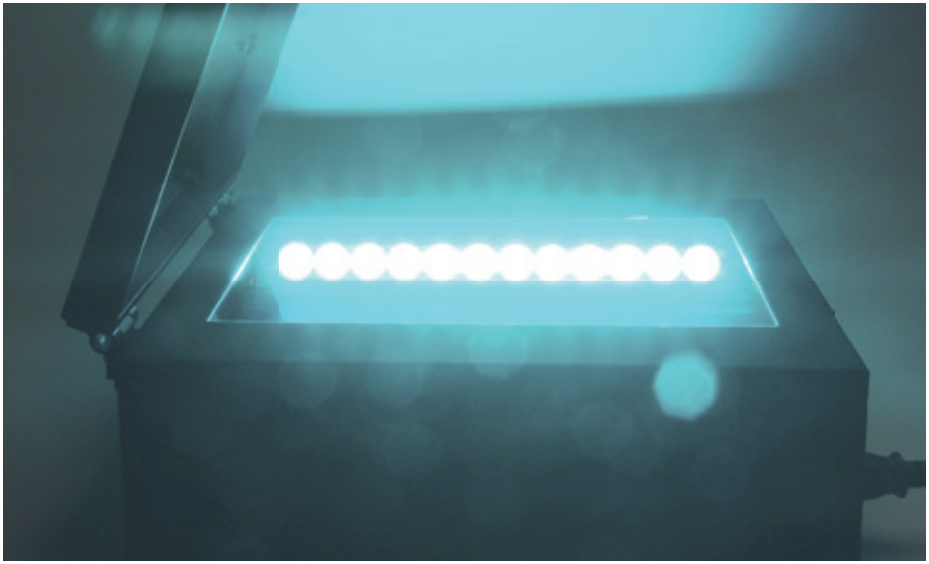
Easily cut out DNA bands by attaching the amber filter shield to the lid of the FAS-BG LED BOX.

SPECIFICATIONS		
Safe Blue/Green LED light	✓	Blue/Green light spectrum from 470 nm to 520 nm No risk of damaging DNA or harming your skin and eyes
Easy image capture	✓	CMOS 8 MPixel camera | Exposure time: 21 exposure steps (0.2 - 2 sec) Image types: TIFF, JPEG and PNG | Image Storage: USB 2.0
Intuitive handling	✓	5" color LCR touch panel with inbuilt control software
2 White light sources	✓	Epi white light for petri dishes and membranes White back light for protein gels
Compact footprint	✓	Dimensions (H x D x W): 23 cm x 25.4 cm x 20.7 cm Illuminated area: 16 cm x 11.5 cm; Weight: 3.2 kg
Connectivity	✓	2x USB port (1x front, 1x back) | 1x HDMI port | Thermal printer support

Ordering information

Cat. No.	Product	Content
GP-04LED	FastGene® FAS-BG LED BOX	Gel doc system, amber filter shield and black velvet sheet

FastGene® Transilluminators



- **Very high life expectancy**
- **Amber filter / UV filter included**
- **Safe Blue/Green LED or Blue LED light**
- **Easy excision of DNA bands**

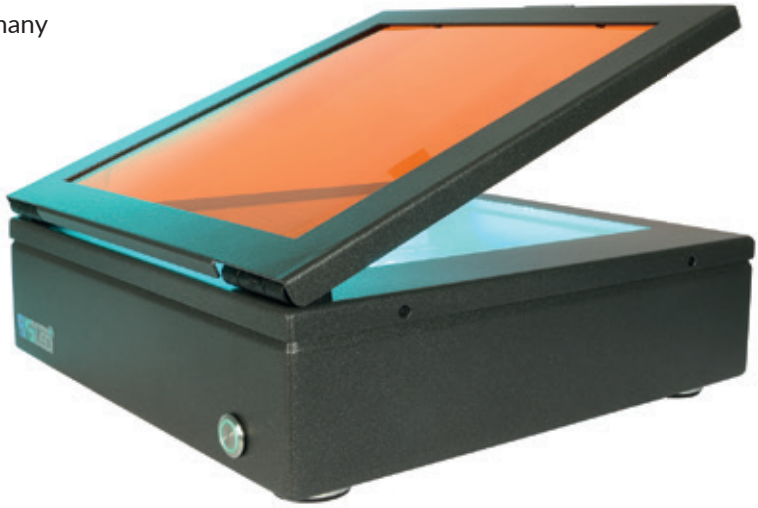
FastGene® Transilluminators

FastGene® Transilluminators offer safe and efficient DNA and RNA detection. Blue/Green LED models (470–520 nm) support green, red, and yellow dyes like MIDORIGreen and ethidium bromide, while Blue LED versions (~470 nm) are ideal for green stains but not red dyes. The FastGene® UV Transilluminator provides reliable ethidium bromide detection with a protective filter against harmful UV radiation.

Cat. No.	FG-09WS	FG-11	FG-05	FG-06	FG-300
Name	FastGene® Blue/Green LED Transilluminator DE	FastGene® Blue/Green LED Flashlight	FastGene® Blue LED Illuminator	FastGene® Blue LED Transilluminator	FastGene® UV Transilluminator
Light source	BG LED BLUE GREEN	BG LED BLUE GREEN	Blue LED (470 nm)	Blue LED (470 nm)	UV light (302 nm)
Compatible DNA dyes	Green and red dyes	Green and red dyes	Green dyes	Green dyes	Red and green dyes
Imaging area	21 cm x 26 cm	n.a.	12 cm x 7 cm	20 cm x 16 cm	26 cm x 21 cm
Dimensions (H x D x W)	12 cm x 32 cm x 32 cm	2.5 cm x 19 cm x 3.9 cm	3 cm x 21 cm x 21 cm	8 cm x 28 cm x 34 cm	8 cm x 28 cm x 34 cm
Weight	4.2 kg	0.17 kg	2.1 kg	3 kg	4.3 kg
Filter	Amber filter (~520 nm)	Amber filter (~520 nm)	Amber filter (~520 nm)	Amber filter (~520 nm)	UV blocking shield

FastGene® Blue/Green LED Transilluminator DE

Made
In
Germany



- **Huge illumination area**
- **Amber filter included**
- **Safe Blue/Green LED**
- **Easy excision of DNA bands**

Large Blue/Green LED Transilluminator

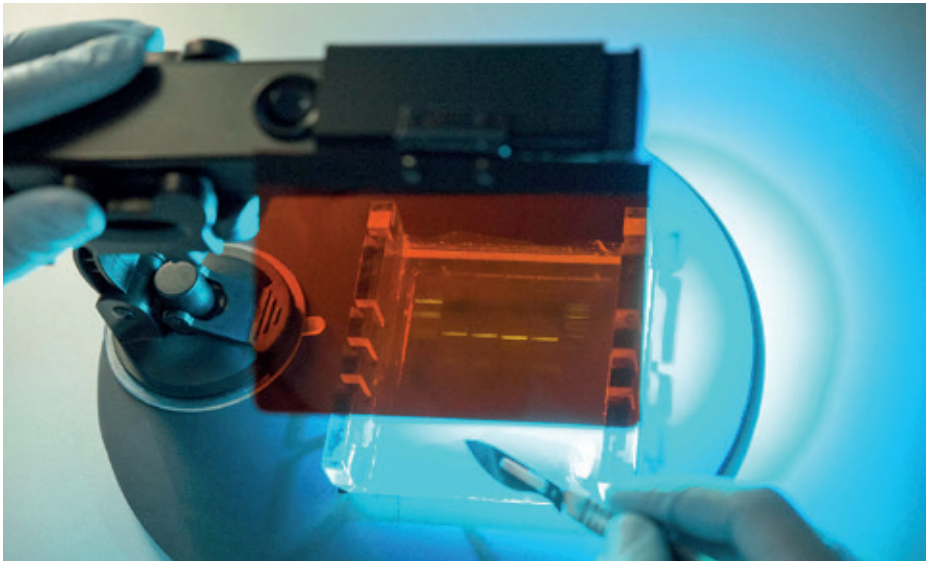
The FastGene® Blue/Green LED Transilluminator DE features the same powerful transilluminator used in the FAS-DIGI PRO and FAS-DIGI Compact Systems. With its generous size of 21 cm x 26 cm, it can accommodate gels of any size. The large amber filter shield makes it easy to excise DNA fragments from the gel without the concern of DNA degradation, thanks to the safe Blue/Green LED light.

SPECIFICATIONS		
Huge illuminated area	✓	Dimensions (H x D x W): 12 cm x 32 cm x 32 cm | Illuminated area: 26 cm x 21 cm Weight: 4.2 kg
Safe Blue/Green LED light	✓	Spectrum of light with Blue/Green light from 470 nm to 520 nm No risk of damaging DNA or harming your skin and eyes
Amber filter included	✓	Amber shield for a clear detection of DNA/RNA bands

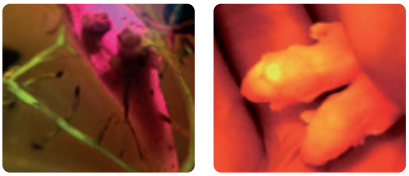
Ordering information

Cat. No.	Product
FG-09WS	FastGene® Blue/Green LED Transilluminator DE

FastGene® Blue/Green LED Flashlight



- Portable transilluminator
- Safe Blue/Green LED light
- Detection of fluorescent proteins in living organisms



Detection of fluorescent proteins in plants and animals.

Fluorescence detection from the top

The FastGene® Blue/Green LED Flashlight enables safe visualization of fluorescent signals from above. Its Blue/Green LED light effectively excites green, red, and yellow DNA dyes, as well as fluorescent proteins like GFP, mCherry, RFP, and YFP. This makes it ideal for detecting fluorescence in living organisms, including bacterial colonies, tissues, plants, and small animals, without causing any harm.

Ordering Information

Cat. No.	Product
FG-11	FastGene® Blue/Green LED Flashlight (stand & cutting board are included)

FastGene® Blue LED (Trans-)Illuminators

- Safe Blue LEDs
- Work with green DNA stains
- Includes a visualization filter

The FastGene® LED Illuminator (Cat. No. FG-05).

A safer alternative to UV light

The Blue LED (Trans-)Illuminators utilize Blue LEDs with a precise 470 nm emission peak. This ensures efficient visualization of green nucleic acid stains like MIDORIGreen and SYBR® dyes while eliminating the risks associated with UV exposure. All illuminators come with a filter, allowing for clear visualization and easy excision of DNA bands from the gel

The FastGene® Blue LED Transilluminator (Cat. No. FG-06)

Ordering Information

Cat. No.	Product
FG-05	FastGene® Blue LED Illuminator
FG-06	FastGene® Blue LED Transilluminator

FastGene® UV Transilluminator

High-quality UV light table

The FastGene® UV Transilluminator features superior UV lamps and a specialized filter system for effective protection against harmful UV radiation, ensuring reliable DNA detection with ethidium bromide.

The FastGene® UV Transilluminator.

Ordering Information

Cat. No.	Product
FG-300	FastGene® UV Transilluminator

LAB INSTRUMENTS

qFYR Real-Time PCR Systems	64
NanoSpec - Spectrophotometer	68
NanoView - Photometer	70
Ultra Cycler - PCR Cycler	72

FastGene® qFYR Real-Time PCR Systems

- **Available with 4+1 channels or 6 channels**
- **Rapid heating and cooling rates**
- **96 well block with gradient function**
- **Intuitive software including high resolution melt analysis**
- **For expression analysis, genotyping, pathogen detection and many more**

FastGene® qFYR

FastGene® qFYR PLUS

Choose your number of channels

The FastGene® qFYR is available as a 4+1-channel model for standard applications and as a 6-channel model, the qFYR Plus, for more options and advanced research needs.

Highest precision Real-Time PCR

The FastGene® qFYR is a precision instrument designed for Real-Time PCR experiments, enabling sensitive detection and quantification of nucleic acids. It amplifies target DNA sequences with an intercalating dye or fluorescent reporter, detecting real-time fluorescence increases for accurate measurement.

Outstanding performance

No matter how many samples are used with the FastGene® qFYR, it delivers reliable and consistent results over the entire 96-well area. The installed superior quality optics and precise scanning heads eliminate cross-talk between wells and allow time-resolved signal detection of various fluorescent channels in a single well.

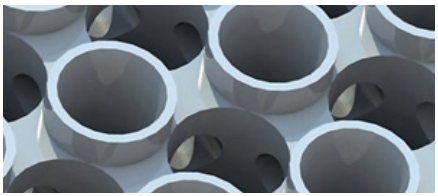
Ordering information

Cat. No.	Product
FG-QPTC01	FastGene® qFYR Real-Time qPCR Cycler (4+1 channels, 96-well block)
FG-QPTC02	FastGene® qFYR Plus Real-Time qPCR Cycler (6 channels, 96-well block)

FastGene® qFYR Real-Time PCR Systems

Superior thermal cycler

The qFYR models offer exceptional temperature control with precision (± 0.2°C) and uniformity (± 0.2°C) across the entire 96-well plate. The innovative hollowed-out thermal block design ensures rapid heating and cooling rates (up to 6°C per second), enabling fast qPCR protocols. Equipped with advanced Peltier components, the system guarantees high reaction quality and performance stability.



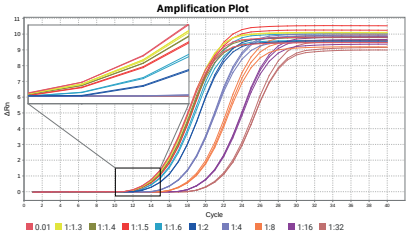
The thermal block of the FastGene® qFYR and qFYR Plus has a unique, hollowed out structure, allowing very fast heating and cooling rates for reliable and consistent qPCR results.

qFYR 4+1-Channel System

The FastGene® qFYR features a 4+1 channel system with four channels for commonly used Real-Time PCR fluorescence dyes. What sets the qFYR apart is the unique double FAM/SYBR configuration in the scanning head. This innovation enables faster scanning times for time-consuming melt curve and high-resolution melt curve analyses, significantly reducing experimental time.

EMPTY	FAM /SYBR	ROX / Texas Red
FAM /SYBR	VIC / HEX / TET / JOE	CY5 / Quasar 670

The FastGene® qFYR contains four different color channels with a double FAM/SYBR channel.



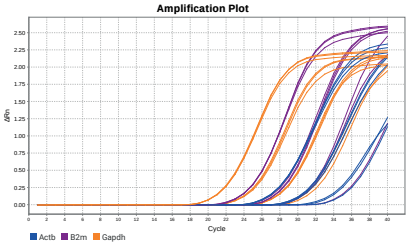
Highest sensitivity allows to discriminate concentration differences down to 1:1.3-fold dilutions.

qFYR Plus 6-Channel System

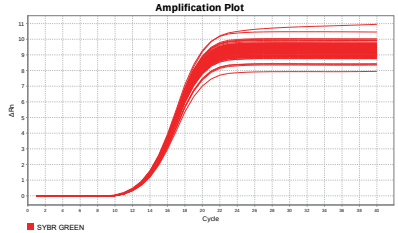
The FastGene® qFYR Plus features a unique 6-channel system, providing coverage for a wide range of Real-Time PCR fluorescence dyes. This advanced system ensures maximum flexibility and sensitivity for a variety of qPCR applications.

ATTO 425	VIC / HEX / TET / JOE	CY5 / Quasar 670
FAM /SYBR	ROX / Texas Red	Cy5.5/Quasar 705/Alexa Fluor 680

The FastGene® qFYR Plus contains six different unique channels.



With the multiplex function, the FastGene® qFYR can discriminate up to four and the FastGene® qFYR Plus up to six different targets in a single reaction well.

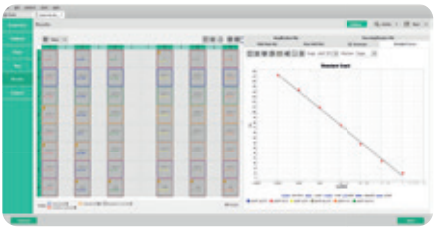


Typical real-time fluorescence based amplification plots, recorded on the FastGene® qFYR.

FastGene® qFYR Real-Time PCR Systems

User-friendly software for seamless operation

The software is designed for simplicity and ease of use, with a clear, intuitive menu layout. It meets the needs of users with various experimental setups, and personalized settings can be easily adjusted. Integrated analysis algorithms automate key processes like baseline subtraction and Cq value threshold calculation. Both absolute and relative quantification of nucleic acids are also streamlined for convenience



Screenshot FastGene® qFYR software: The software shines with a clear user interface combined with highly customizable settings.

Get the right consumables for qFYR

The FastGene® qFYR is compatible with low-profile (0.1 ml) PCR tubes/8-well PCR tube strips with transparent, flat tops as well as non-skirted or half-skirted low profile 96 well PCR reaction plates:

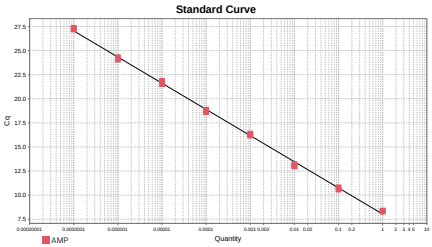
- low-profile (0.1 ml) clear/white PCR thin-walled single tube, flat-topped transparent optical tube cover.
- low-profile (0.1 ml) clear/white PCR thin-walled 8-tube, flat-top transparent optical tube cover.
- low-profile (0.1 ml) clear/white PCR thin-walled 96-well plate with no hemline or hemline.

It is not compatible with high-profile (0.2 ml) PCR reaction tube and convex tube covers.

The devices for multiple applications

The FastGene® qFYR Real-Time PCR Systems were developed to meet highest laboratory standards and deliver reliable performances for various applications:

- Gene expression analysis
- Absolute and relative quantification
- Endpoint qualitative analysis
- Genotyping
- Gene mutation analysis
- Pathogen detection
- GMO detection
- Protein stability screening
- miRNA analysis
- Melting curve analysis



Plasmid DNA amplification shows an optimal linearity over 8 orders of magnitude in a 10-fold dilution series from 1 ng to 1x10^{-6} ng, demonstrating the high dynamic range of the system.

The FastGene® qFYR is compatible with various white and clear low-profile (0.1 ml) tubes and plates.

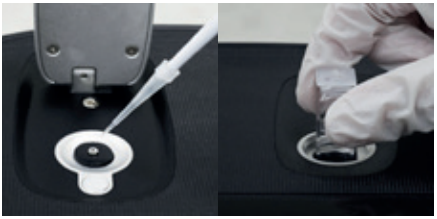
The FastGene® qFYR is an open platform device and works with dyes from different manufacturers. But, we recommend our FastGene® IC Green and Probe mixes as the ideal reagents for the FastGene® qFYR.

FastGene® qFYR Real-Time PCR Systems

SPECIFICATIONS			
Thermal cycler		**FastGene® qFYR**	**FastGene® qFYR Plus**
Block capacity	✔	96	96
Sample volume	✔	1-50 µl	1-50 µl
Heating/cooling method	✔	Peltier	Peltier
Maximum ramp rate	✔	6 °C/s (thermal block) 4 °C/s (sample)	6 °C/s (thermal block) 4 °C/s (sample)
Temperature setting range	✔	4-100 °C	4-100 °C
Heated lid	✔	Electronic automatic lid	Electronic automatic lid
Temperature accuracy	✔	± 0.2 °C	± 0.2 °C
Temperature uniformity	✔	± 0.2 °C	± 0.2 °C
Gradient zone	✔	12 columns	12 columns
Gradient range	✔	1-36 °C	**1-40 °C**
Optical detection		**FastGene® qFYR**	**FastGene® qFYR Plus**
Excitation source	✔	4 +1 Long-life, high-performance LEDs	**6 Long-life, high-performance LEDs**
Detector	✔	Highly sensitive PMT (photo multiplier tube) with Fresnel lens	Highly sensitive PMT (photo multiplier tube) with Fresnel lens
Scanning principle	✔	Time-resolved scanning technology	Time-resolved scanning technology
Detector position	✔	Top of the block	Top of the block
Excitation/detection range	✔	455-650 nm / 510-715 nm	**415-685 nm /** **455-745 nm**
Fluorescence channel	✔	4 + 1 channels	**6 channels**
Detection sensitivity	✔	1 copy of the target sequence	1 copy of the target sequence
System sensitivity	✔	1.33-fold target difference detection	1.33-fold target difference detection
Dynamic range	✔	10 orders of magnitude	10 orders of magnitude
Dye compatibility	✔	FAM/SYBR Green, VIC/JOE/HEX/TET, JUN, ROX/Texas Red, Mustang Purple, Cy5/LIZ	FAM/SYBR Green, VIC/JOE/HEX/TET, JUN, ROX/Texas Red, Mustang Purple, Cy5/LIZ, **Cy5.5/Quasar 705/Alexa Fluor 680, ATTO 425**

FastGene® NanoSpec Spectrophotometer

- Microvolume drop and cuvette reader
- Full analysis (190 - 850 nm)
- 20+ measurement modes
- Simple and intuitive menu



The FastGene® NanoSpec combindes a microvolume drop reader with a cuvette reader.

Versatile UV-Vis Spectrophotometer

The FastGene® NanoSpec is a user-friendly UV-Vis spectrophotometer offering full-spectrum analysis (190–850 nm) with over 20 preset measurement modes. It enables fast and precise quantification of nucleic acids, proteins, protein assays, and bacterial cultures. Its integrated control unit and glove-compatible touchscreen ensure effortless operation.

Dual-mode sample measurement

The system features both a microvolume drop reader and a cuvette reader, offering flexibility for various applications. The drop reader enables precise DNA, RNA, and protein quantification, while the cuvette reader is ideal for protein assays, enzyme kinetics, and bacterial concentration measurements.

Compact and powerful stand-alone device

With a small footprint of approximately the size of a DIN A4 page, the FastGene® NanoSpec is a space-saving yet powerful spectrophotometer. Its compact design makes it an ideal stand-alone device for labs with limited benchtop space.

Ordering information

Cat. No.	Product
FG-NP01	FastGene® NanoSpec Photometer

FastGene® NanoSpec Spectrophotometer

SPECIFICATIONS		
Light source	✔	Xenon Flash Lamp
Wave length spectrum	✔	190 - 850 nm
Measurement time	✔	< 8 Sec
Spectral Resolution	✔	1.0 nm (FWHM at Hg 253.7 nm)
Minimum Sample Size	✔	1 µL (microvolume mode)
Cuvette Center Height	✔	8.5 mm
Connectivity, Data storage	✔	4 x USB Ports, Ethernet, RS-232, 32 GB Internal storage
Integrated power supply	✔	100-240V, 4 A (50/60 Hz) automatic voltage sense, standard IEC Inlet plug
Display	✔	7-inch widescreen 1200 x 800 HD colour touch display
Footprint (D x W), Weight	✔	29 cm x 21.6 cm, 3.0 kg

Effortless operation

The FastGene® NanoSpec software is designed for simplicity and ease of use. With over 20 preset measurement modes organized into clear tabs, it supports a wide range of applications. Creating personalized programs is intuitive, making every analysis straightforward and efficient.

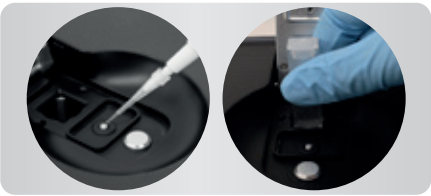
Nucleic Acids & Protein UV Measurement
Measure DNA, RNA, and proteins with preset or customizable modes, including eight options for protein analysis at 280 nm.protein analysis.

Protein Assay
The Protein Assay tab allows quantification of protein concentration at a specific wavelegth, after staining with colorimetric reagents. The protein concentration is determined using a standard curve.

More
The More Application tab supports various measurement modes used in general-purpose UV-Vis spectrophotometry.

FastGene® NanoView Photometer

- **Microvolume drop and cuvette reader**
- **For DNA, RNA, Proteins and OD600**
- **10 preset measurement modes**
- **Simple and intuitive menu**



Microvolume drop reader or cuvette reader - Both measurement modes are smartly integrated under one lid and allow you to take precise measurements of DNA, RNA, protein or OD600.

Compact & Precise

The FastGene® NanoView is a smart and lightweight photometer, integrating both a microvolume drop reader and a cuvette reader under one lid. With ten preset modes, it allows fast and precise analysis of nucleic acids, proteins, and OD600 measurements. Its intuitive, glove-compatible touchscreen ensures easy operation, making it an ideal choice for any lab.

Dual-functionality

The FastGene® NanoView features an integrated microvolume drop reader and cuvette reader, both smartly housed under one lid. The drop reader ensures precise DNA, RNA, and protein measurements at 260 nm and 280 nm, while the cuvette reader enables accurate OD600 measurements for bacterial culture density assessment.

Ordering information

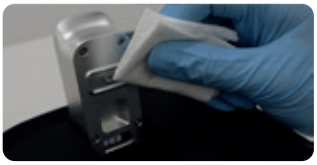
Cat. No.	Product
FG-NP02	FastGene® NanoView Photometer

FastGene® NanoView Photometer

SPECIFICATIONS		
Light source	✔	LEDs
Wave lengths	✔	260 nm, 280 nm / 600 nm (Cuvette) / 360 nm (Baseline)
Measurement time	✔	< 10 Sec
Minimum Sample Size	✔	2 µL
Cuvette Center Height	✔	15 mm
Connectivity, Data storage	✔	2 x USB ports, USB-B, RS-232, 8 GB internal storage
Integrated power supply	✔	100-240V, 4 A (50/60 Hz) automatic voltage sense, standard IEC Inlet plug
Display	✔	4.3-inch 480 x 272 colour touch display
Footprint (D x W), Weight	✔	19 cm x 14.5 cm, 1.4 kg

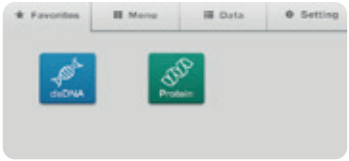
Convenient and optimized user interface

The FastGene® NanoView features an intuitive software UI with large, self-explanatory icons for effortless navigation. With 10 preset measurement modes, it enables quick and convenient analysis of DNA, RNA, proteins, and OD600.



The microvolume drop reader is effortlessly maintained—simply wipe it with a dust-free laboratory tissue between measurements for quick and reliable cleaning.

Main Menu tab composition
The main menu features intuitive icons for easy access to distinct measurement modes.



Favorites Screen
Save your most frequently used measurement modes in the Favorites tab for fast navigation and convenient use.

FastGene® Ultra Cycler

- **Fast ramp rates for a quick PCR**
- **96-well PCR instrument**
- **Gradient function**
- **Touchscreen with easy-to-use software**

Simple and precise

The FastGene® Ultra Cycler generates a precise thermal gradient of up to 24°C with stable, repeatable temperatures per cycle. Its fully adjustable heated lid supports various 0.2 ml PCR tubes and 96-well microplates. Featuring a large touchscreen and intuitive programming, this compact and robust system ensures reliable amplification for years.

Optimized PCR with gradient function

The gradient function enables efficient optimization of reactions by identifying the best annealing temperature across a 24°C range. The system supports 96 individual PCR tubes, 12 PCR 8-well strips, or 96-well PCR plates (0.2 ml). The Ultra Cycler combines cutting-edge electronics and Peltier technology for exceptional ease and performance.

The temperature gradient function ensures accurate calculation of the temperature in each lane, allowing for more precise determination of the optimal annealing temperature.

Ordering information

Cat. No.	Product
FG-TC01	Gradient UltraCycler PCR Thermocycler with touchscreen

FastGene® Ultra Cycler

SPECIFICATIONS		
Gradient	✔	12 columns with 24°C gradient range
High temperature range, accuracy and resolution	✔	Temperature range: 4°C - 99°C | Temperature accuracy: ± 0.25°C Temperature resolution: 0.1°C increments
Very fast ramp rates	✔	Heating rate: 7°C / per second Cooling rate: 5°C / per second
Compatible	✔	0.2 ml tubes or strip tubes with flat or domed caps 96- well high or low skirted plates with strip caps, adhesive seal
Condensation control	✔	Heated lid with automatically applied pressure
Heated lid	✔	Heated lid with a temperature range of 60 °C - 115°C
Compact design	✔	Dimensions (H x D x W): 19 cm x 28.5 cm x 18 cm Weight: 5.5 kg
Integrated power supply	✔	100-240V, 4 A (50/60 Hz) automatic voltage sense, standard IEC Inlet plug
Huge touchscreen	✔	7-inch widescreen colour touch display

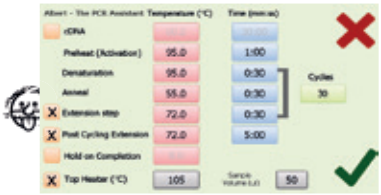
Scientist
Plant Biotic Interactions
University Göttingen

★★★★★

"We brought the FastGene® Ultra Cycler from Nippon Genetics in September 2024. It quickly became the most popular PCR machine in the lab. It has all the features a modern PCR machine should have (gradient option, etc.), is easy to use, and has a super intuitive touch panel interface. It is also remarkably compact and quiet."

Touchscreen interface and quick setup with Albert

The FastGene® Ultra Cycler features a high-performance graphical processor with a large 7-inch color touchscreen display, ensuring easy run setup and monitoring. The intuitive software allows the creation of even the most complex thermal profiles effortlessly. With Albert, users can quickly configure easy to moderate complexity profiles, including all steps of a routine PCR, such as 1-Step RT-PCR, in just a few moments.



The Albert PCR assistant simplifies the creation of easy to moderately complex profiles in moments. All essential thermal steps in a typical PCR profile are included, and parameters can be adjusted with just a few clicks.


NIPPON Genetics
EUROPE GmbH
www.nippongenetics.eu
www.nippongenetics.de

LAB DEVICES

CapMaster Pro	76
Mini Centrifuge	78
Plate Centrifuge	79
Mini Dry Bath	80
Vortexer	81
Tissue Grinder	82

FastGene® CapMaster Pro

- **Greatly improves one-handed tube handling**
- **Compatible with diverse screw-cap tubes**
- **5 operation modes**
- **Compact and stable design**

Versatile and stable tube handling

The FastGene® CapMaster Pro supports cap diameters from 11 to 40 mm, making it compatible with microcentrifuge tubes, cryo tubes, 15 ml centrifuge tubes, and 40 ml centrifuge tubes. Its compact design fits seamlessly into any clean bench or on any benchtop, while the heavy base ensures stability for secure and effortless tube handling.

Reliable support for your lab work

The FastGene® CapMaster Pro capper/decapper device is an innovative solution that automates the handling of sample tube caps for a wide range of applications. Designed for ease of use, it allows you to open and close tubes with one hand—ideal for situations like working under a clean bench while holding a pipette. This boosts lab efficiency and reduces hand strain.

Unscrewing a tube with one hand while working under a clean bench and holding a pipettor in the other can be challenging. That's where the FastGene® CapMaster Pro comes in to help, making tube handling effortless and efficient.

Ordering information

Cat. No.	Product
FG-CDC05	FastGene® CapMaster Pro
FG-CDC05-GS	FastGene® CapMaster Pro Gripper set

FastGene® CapMaster Pro

SPECIFICATIONS		
Dimensions (L x W x H)	✔	24 cm x 17 cm x 30 cm
Weight	✔	3.8 kg
Cycle time decap/cap	✔	<3 sec
Compatibility	✔	11–40 mm diameter screw cap tubes
Sensing Method	✔	Pressure sensor
Power Aadapter	✔	Input: AC100-240 V, 50/60 Hz Output: DC 24V, 2.7A

Flexible operation modes for every workflow

The CapMaster Pro offers multiple operation modes to suit your workflow:

- **Hold Cap**: Decap with cap held → Recap the same cap
- **Release Cap**: Decap with cap release → Recap on the tube
- **Decap Cap**: Decap and release immediately
- **Cap Only**: Recap on the tube
- **Release Cap + Decap Only**: Decap and release after 1.5 sec

For switching between modes simply press the power button.

The Capmaster Pro can be used in five different operation modes.

Adaptive gripping with pressure contact

Using the CapMaster Pro in daily lab work is effortless. Simply press the tube against the pressure contact, and the grippers will automatically adjust to its diameter, securely screwing or unscrewing the cap with ease.

The grippers automatically adjust to the tube diameter and begin the screwing or unscrewing process.

It supports cap diameters from 11 to 40 mm, making it compatible with microcentrifuge tubes, cryo tubes, 15 ml centrifuge tubes, and 40 ml centrifuge tubes.

If the CapMaster Pro is used extensively and the grippers show signs of wear, they can be easily replaced with the FastGene® CapMaster Pro Gripper Set, ensuring continued efficiency and reliability.

FastGene® Mini Centrifuge

The ideal lab companion

The FastGene® Mini Centrifuges are available in four colors and come with three rotors. The first rotor accommodates up to six 1.5 ml microcentrifuge tubes, and can also spin down 0.5 ml and 0.2 ml tubes with the included adapters. The second rotor is designed for two 8-well strips (0.2 ml capacity). These rotors are perfect for applications requiring low g-forces, such as microfiltration, cell separation, and quick spin-downs of liquid from tube lids and walls.

The FastGene® Mini Centrifuge adaptors and rotors.

- **Four different colours available**
- **Supplied with standard microtube, slide and strip tube rotor**
- **Ideal for quick spin down and microfiltration**

The FastGene® Mini Centrifuge is available in pink, blue, green and red.

SPECIFICATIONS		
Three different rotors included	✔	Standard angle rotor for 6x 1.5/2.0 ml tubes | Slide rotor 0.2 ml strip tube rotor
Adaptors included	✔	6x adaptors for 0.5 ml tubes 6x adaptors for 0.2 ml tubes
High speed	✔	Centrifugal force: 2,000 x g Speed: 6000 rpm
Compact design	✔	Dimensions (H x D x W): 11.8 cm x 17.5 cm x 14.8 cm

Ordering information

Cat. No.	Product	Content
NG002P	FastGene® Mini Centrifuge (Pink)	Pink Mini Centrifuge | 3 rotors | 6 adaptors for 0.2 ml and 0.5 ml tubes
NG002B	FastGene® Mini Centrifuge (Blue)	Blue Mini Centrifuge | 3 rotors | 6 adaptors for 0.2 ml and 0.5 ml tubes
NG002G	FastGene® Mini Centrifuge (Green)	Green Mini Centrifuge | 3 rotors | 6 adaptors for 0.2 ml and 0.5 ml tubes
NG002R	FastGene® Mini Centrifuge (Red)	Red Mini Centrifuge | 3 rotors | 6 adaptors for 0.2 ml and 0.5 ml tubes

FastGene® Plate Centrifuge

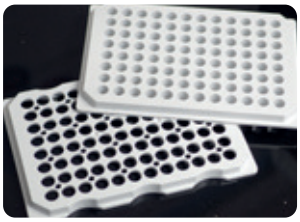
Simple and efficient

The FastGene® Plate Centrifuge offers quick, gentle, and reliable centrifugation for a variety of plate and tube types. With an easy-to-use illuminated display, you can set spinning times (up to 10 minutes) with minimal effort. This compact, cost-effective centrifuge is a great alternative to high-speed models, delivering excellent performance for PCR, qPCR, ELISA, high throughput screenings, and more.

Versatile and silent operation

Equipped with two adapters, the FastGene® Plate Centrifuge works with all 96-well plates (full-skirted, half-skirted, or non-skirted) and 384-well plates. It also handles individual reaction tubes and 8-well strips, making it perfect for diverse laboratory needs. Its ultra-silent rotor and tight lid sealing reduce noise, creating a more focused and quiet lab environment. The removable rotors make cleaning effortless, ensuring a safe and sterile workspace.

- **Plate centrifuge with two plate carriers**
- **Convenient, silent and easy-to-use**
- **For 96- and 384-well plates**



Adapter plates for semi- and non-skirted 96-well plates as well as single reaction tubes or 8-tube strips.

SPECIFICATIONS		
Compatible with different plates	✔	96-well plates (full-skirted, semi-skirted and non-skirted) 384-well plates (full-skirted)
High speed	✔	Centrifugal force: 480 x g Speed: 2200 rpm
Compact size	✔	Dimensions (H x D x W): 14 cm x 36 cm x 29 cm Weight: 1.3 kg
Adapter plates included	✔	Adapter plate for semi-and non-skirted 96-well plates Adapter plate for single reaction tubes or 8-tube strips
Integrated power supply	✔	200-240 V, 50-60 Hz Additional version with 110 V, 50-60 Hz is also available

Ordering Information

Cat. No.	Product	Content
NG040	FastGene® Plate Centrifuge	Plate Centrifuge, 4 x Adapters (200-240 V)

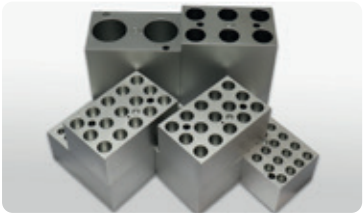
FastGene® Mini Dry Bath Advance

Precise and versatile sample heating

The FastGene® Mini Dry Bath Advance is a microprocessor-controlled block heater designed for accurate and reliable temperature control. Offering 9 customizable programs, it is ideal for a wide range of applications such as sample tempering, denaturation, serum coagulation, and more. With exchangeable thermo blocks, it supports various tube sizes from 0.2 ml PCR tubes to 50 ml culture tubes, making it a compact yet powerful solution for your incubation needs.

The FastGene® Mini Dry Bath Advance comes equipped with a 15x 1.5 ml tube thermoblock and allows for nine customizable programs.

- **Precise temperature control**
- **9 setable programs**
- **Exchangeable thermoblocks**



The FastGene® Mini Dry Bath Advance offers seven different thermoblocks, compatible with a variety of tube sizes, from 0.2 ml PCR tubes to 50 ml culture tubes, ensuring various laboratory applications.

SPECIFICATIONS		
Temperature Control Range	✓	room temp. (+5 °C) - ~100 °C)
Heating Time, cooling time (20 °C to 100 °C)	✓	≤ 18 min, natural cooling
Temperature Accuracy Discrepancy	✓	± 0.3 °C
Max. temperature	✓	100 °C
Dimensions (H x D x W)	✓	13.6 cm x 16 cm x 11 cm
Cover	✓	With Transparent Plastic Cover

FastGene® Mini Dry Bath Advance

Ordering information

Cat. No.	Product	Content
NG020A	FastGene® Mini Dry Bath Advance	Mini dry bath main device
NG025A	Metal thermo block	For 32x 0.2 ml reaction tubes
NG029A	Metal thermo block	For 24x 0.5 ml reaction tubes
NG026A	Metal thermo block	For 15x 1.5 ml reaction tubes
NG030A	Metal thermo block	For 15x 2 ml reaction tubes
NG024A	Metal thermo block	For 12x 5 ml reaction tubes
NG027A	Metal thermo block	For 6x 15 ml reaction tubes
NG028A	Metal thermo block	For 2x 50 ml reaction tubes

FastGene® Vortexer Mini

Compact yet powerful

The FastGene® Vortexer Mini is designed for efficient sample mixing in single tubes, falcon tubes, and beakers. With an adjustable speed range of 0-4000 rpm, it offers both gentle and vigorous shaking. Its heavy base ensures stability, preventing movement and sample tube slippage during operation.

SPECIFICATIONS	
Construction material	Chemical resistant plastic
Support system	Heavy base
Operational mode	Touch
Speed setting	Analogue
Speed	0 - 4000 rpm

Ordering information

Cat. No.	Product	Content
VX2	FastGene® Vortexer Mini	Main Unit

FastGene® Mixy Professional Tissue Grinder

SPECIFICATIONS	
Speed:	12,000 rpm
Applicable tissues	Animal, bacteria, plants (root and leaf) and bones
Life time of the rechargeable battery	4 hours
Dimension (H x W):	15.5 cm x 2.5 cm
Weight:	0.2 kg

The easiest way to homogenize tissue

The cordless design of the Tissue Grinder Mixy Professional eliminates the hassle of cables during grinding. Simply press the large button on top to start homogenizing your samples quickly and efficiently in a tube. Perfect for seamless tissue disruption without distractions.

- **Cordless grinder**
- **Homogenization of pellets, animal tissue, bones, plant tissue and food**
- **Metal or plastic pestles available**

The Tissue Grinder Mixy Professional can be used with a metal pestle to disrupt harder materials like animal bones or plant tissue. For softer materials such as bacterial pellets or soft tissue, plastic pestles are ideal, providing flexibility for various sample types.

Versatile and efficient grinding

The Tissue Grinder Mixy Professional is a motor-driven grinder designed for resuspending pellets or disrupting soft tissue in microcentrifuge tubes. Powered by a 3.7 V battery, it offers up to 4 hours of cordless operation, making it a convenient tool for efficient sample homogenization.

The Tissue Grinder comes with a rechargable battery, a battery charger, samples pestles and user manual.

Ordering information

Cat. No.	Product	Content
NG010	Mixy Professional	Tissue Grinder with lithium battery and 10 plastic pestles
NG011	Metal Pestle	Autoclavable steel pestle
NG006	Plastic Pestles	100 disposable plastic pestles 1.5 cm^3

Need more information about our lab devices? Let us know how we can assist you!

www.nippongenetics.eu

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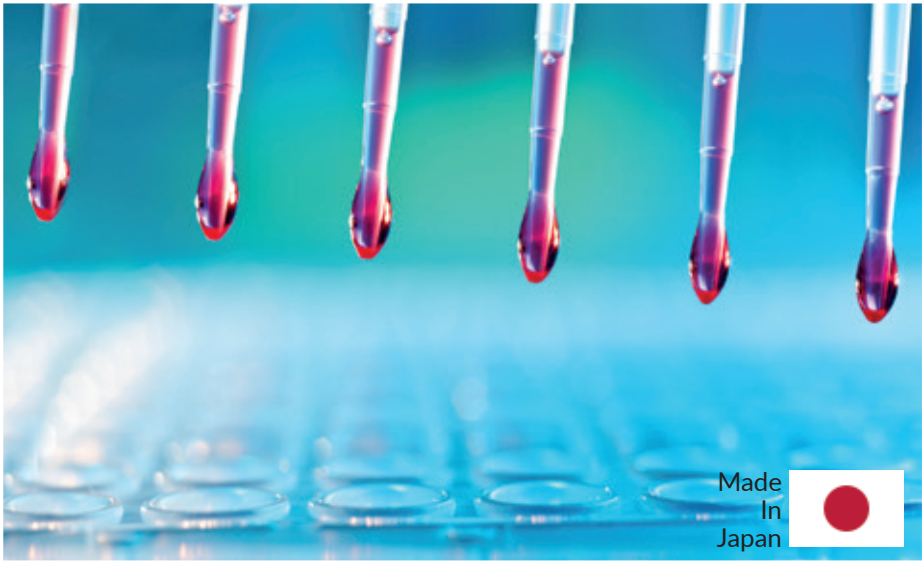
info@nippongenetics.de

LAB PLASTIC

Filter Tips	86
Filter Tip Racks	88
TP Filter Tips	90
PCR Tubes	92
PCR Plates	94
PCR Foils	96
Aluminium Rack	97
CapEasy/Reaction Tubes	98
Centrifuge Tubes	99
Cryo Tubes	100
Screw Cap Tubes	101
Serological Pipettes	102
High-Throughput Plastic	103

FastGene® Filter Tips



- **Highest quality - Made in Japan**
- **Compatible with various pipettes**
- **Easy-to-use and ecological refill system**

Precision made in Japan

Our filter tips are manufactured in Japan under strict quality control standards. This ensures they are free from defects such as filter misplacement, broken or missing tips, and endotoxins. Additionally, all tips are certified free of RNase, DNase, genomic DNA, and proteins, guaranteeing the highest level of purity for sensitive applications.

Maximum compatibility

NIPPON Genetics EUROPE offers high-quality, modern filter tips designed for superior precision and ease of use. Their exceptional compatibility with a wide range of pipettes ensures accuracy and comfort, making daily laboratory work more efficient and reliable.

Eco-friendly refilling system

The FastGene® Refill System is an eco-friendly alternative to the standard pipette tip boxes, significantly reducing plastic waste. The refill packs are wrapped in paper, cutting down on plastic while maintaining convenience. Our high-quality FastGene® Filter Tip Racks securely hold the refill tips, ensuring a smooth and reliable refill process.

D. Palaiologou, PhD
Genesis Genoma Lab
Chalandri, Greece

★★★★★

"We have been using the refillable filter tips from Nippon Genetics for a broad spectrum of molecular biology techniques, including NGS and array-CGH. We are impressed by their high manufacturing quality and ease of use. The tips are long and thin and the filter does not come in contact with the liquid even if you fill it to the maximum. They also exhibit minimum retention of liquids. It is very easy to refill the empty tip boxes (spare tips come in pre-filled and sterile racks) and by using that system you produce less plastic waste! We highly recommend these tips to all researchers looking for excellent quality, value-for-money filter tips!"

FastGene® Filter Tips

Versatile and protective filter tips

FastGene® Filter Tips are available in six different sizes, ensuring broad compatibility with various pipette manufacturers. Each tip is equipped with an internal filter to minimize contamination risks, protecting both your samples and pipettes from aerosols and liquid ingress.

Every tip size is available in a standard plastic box or as an eco-friendly, paper-wrapped refill box, designed for use with the sustainable FastGene® Filter Tip Racks.

Ordering information

10 µl long

10 µl short

Cat. No.	Product	Content
FG-FT10S	10 µl short	10 racks with 96 tips
FG-FT10SRF	10 µl short refill	10 racks with 96 tips
FG-FT10L	10 µl long	10 racks with 96 tips
FG-FT10LRF	10 µl long refill	10 racks with 96 tips

20 µl

Cat. No.	Product	Content
FG-FT20	20 µl	10 racks with 96 tips
FG-FT20RF	20 µl refill	10 racks with 96 tips

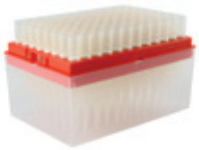
100 µl

Cat. No.	Product	Content
FG-FT100	100 µl	10 racks with 96 tips
FG-FT100RF	100 µl refill	10 racks with 96 tips

200 µl

Cat. No.	Product	Content
FG-FT200	200 µl	10 racks with 96 tips
FG-FT200RF	200 µl refill	10 racks with 96 tips

1000 µl



Cat. No.	Product	Content
FG-FT1000	1000 µl	10 racks with 96 tips
FG-FT1000RF	1000 µl refill	10 racks with 96 tips

FastGene® Filter Tip Racks

- **Racks made for FastGene® Filter Tip Refill boxes.**
- **Highly durable material**
- **Reuse and autoclave at least 100 times**
- **Non-slip rubber mat for a stable stand.**

Durable and Sustainable – Built to Last

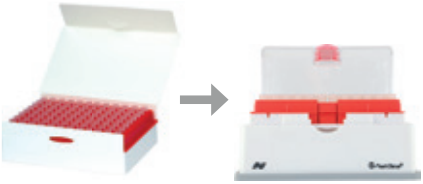
FastGene® Filter Tip Racks are designed for long-term use, with the ability to be autoclaved up to 100 times without compromising quality or reliability. By choosing reusable racks, you contribute to a more sustainable lab environment while maintaining precision and efficiency.

Remarkable quality – Feel the difference

Experience effortless pipetting with our high-quality, durable rack. The sturdy design ensures stability, while the easy-to-open clip allows for one-handed operation. A non-slip rubber mat keeps the rack securely in place and enables convenient stacking in the autoclave.

Reduce, reuse, and stay sustainable

A single scientist can generate up to 1000 kg of plastic waste per year! FastGene® Filter Tip Racks offer an eco-friendly solution with reusable refill boxes designed for FastGene® Filter Tips Refill Boxes.



The FastGene® Filter Tip Racks are specifically developed for the FastGene® Filter Tip Refill System. They provide a stable and secure housing for the refill tips, ensuring effortless replacement while maintaining a reliable and organized workspace.

FastGene® Filter Tip Racks

Two sizes available

FastGene® Filter Tip Racks come in two sizes for optimal organization:

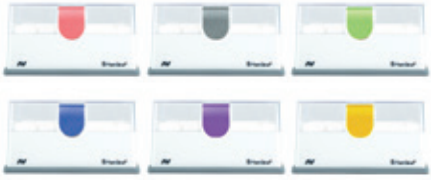
- Small rack: Compatible with 200 µL, 100 µL, 20 µL, 10 µL (long), and 10 µL (short) FastGene® FT Refill Plates.
- Medium rack: Compatible with 1000 µL FastGene® FT Refill Plates.

Small rack (S)

Medium rack (M)

Clip colour	*Proposed FT Refill Plate size*
Blue	*1000 µl (M)*
Violet	*200 µl (S)*
Yellow	*100 µl (S)*
Pink	*20 µl (S)*
Gray	*10 µl long (S)*
Green	*10 µl short (S)*

Use our proposed colour assignments or feel free to combine filter tip volumes and colors to suit your lab's needs.



Mix and match to suit your needs! Choose from six different closure clip colors—blue, violet, yellow, pink, grey, and green—to easily distinguish between tip sizes and keep your lab organized.

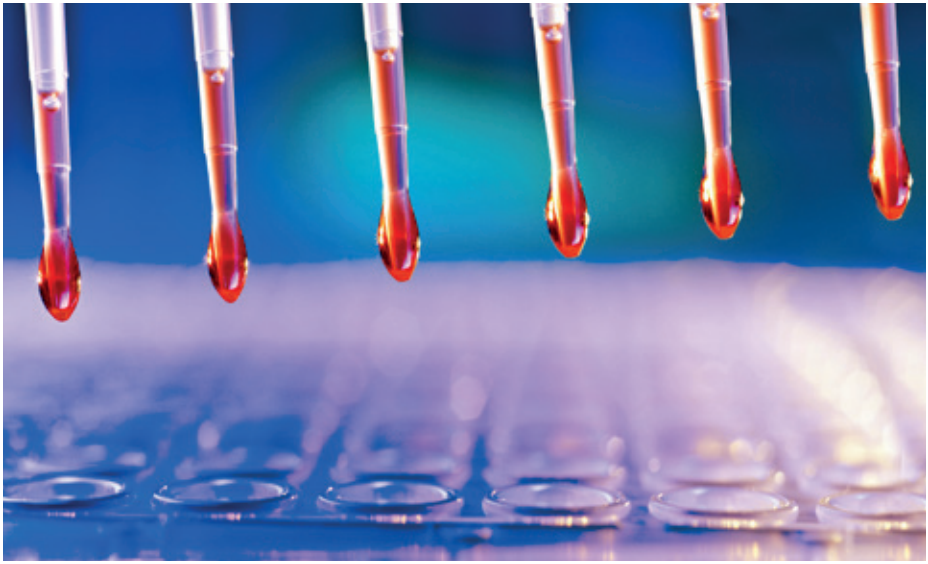
Easy to use with one-hand operation

The colored clips on the FastGene® Filter Tip Racks are simple to insert, remove, and replace. Featuring an easy-to-open mechanism, these clips can be operated with just one hand, making them convenient for quick and efficient lab work.

Ordering information

Cat. No.	Product	Content
Small rack (S)		
FG-FTRS1-blue	FastGene® Filter Tip Rack S blue	Filter Tip Rack S (1) with blue clip colour
FG-FTRS1-violet	FastGene® Filter Tip Rack S violet	Filter Tip Rack S (1) with violet clip colour
FG-FTRS1-yellow	FastGene® Filter Tip Rack S yellow	Filter Tip Rack S (1) with yellow clip colour
FG-FTRS1-pink	FastGene® Filter Tip Rack S pink	Filter Tip Rack S (1) with pink clip colour
FG-FTRS1-gray	FastGene® Filter Tip Rack S gray	Filter Tip Rack S (1) with gray clip colour
FG-FTRS1-green	FastGene® Filter Tip Rack S green	Filter Tip Rack S (1) with green clip colour
Medium rack (M)		
FG-FTRM1-blue	FastGene® Filter Tip Rack M blue	Filter Tip Rack M (1) with blue clip colour
FG-FTRM1-violet	FastGene® Filter Tip Rack M violet	Filter Tip Rack M (1) with violet clip colour
FG-FTRM1-yellow	FastGene® Filter Tip Rack M yellow	Filter Tip Rack M (1) with yellow clip colour
FG-FTRM1-pink	FastGene® Filter Tip Rack M pink	Filter Tip Rack M (1) with pink clip colour
FG-FTRM1-gray	FastGene® Filter Tip Rack M gray	Filter Tip Rack M (1) with gray clip colour
FG-FTRM1-green	FastGene® Filter Tip Rack M green	Filter Tip Rack M (1) with green clip colour

FastGene® TP Filter Tips



- **Compatible with pipettes from Eppendorf, Gilson, Rainin, Thermo, Socorex and many more**
- **Highest quality control**
- **Efficient contamination protection**

Highest quality and best volume control

Quality control is a top priority for FastGene® TP Filter Tips, ensuring they are free from defects such as misplacement of filters, broken tips, or missing tips. All our tips are also free from RNase, DNase, genomic DNA, and proteins. For precise liquid handling, the FastGene® TP Filter Tips are made from transparent material, allowing for easy liquid visibility. Additionally, the smallest (10 µl, short) and largest (1000 µl) tips come with volume marks, enabling clear observation of the aspirated volume.

Compatibility

The FastGene® TP Filter Tips are compatible with the following single channel pipettes:

		FastGene® TP line Filter Tips					
		FG-TP-10	FG-TP-10L	FG-TP-20	FG-TP-100	FG-TP-200	FG-TP-1000
Single Channel Pipettes	Eppendorf (Reference, Research V)	0.5-10 µl	0.1-2.5 µl 0.5-10 µl	2-20 µl	10-100 µl	20-200 µl	100-1000 µl
	Finnpipette (Digital, Focus)	1-10 µl 2-20 µl	1-10 µl 2-20 µl	2-20 µl 10-100 µl	10-100 µl	20-200 µl	100-1000 µl
	Gilson (Pipetman)	P-2, P-10	P-2, P-10	P-20	P-100	P-200	P-1000
	Rainin (SL-PL-Series)	0.5-10 µl	0.5-10 µl	2-20 µl	10-100 µl	20-200 µl	100-1000 µl
	Rainin (XLS-Series)	0.5-10 µl	0.5-10 µl	20-200 µl	20-200 µl	20-200 µl	100-1000 µl
	Brand	0.1-2.5 µl 0.5-10 µl	0.1-2.5 µl	2-20 µl 5-50 µl, 10-100 µl	---	20-200 µl	100-1000 µl
	DragonLab	0.5-10 µl	0.5-10 µl	2-20 µl	10-100 µl	20-200 µl	100-1000 µl
	SOCOREX	0.5-10 µl	0.5-10 µl	20-200 µl	20-200 µl	20-200 µl	100-1000 µl

FastGene® TP Filter Tips

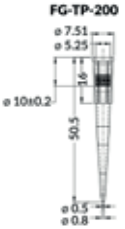
Filter protection and no DNA adsorption

FastGene® TP Filter Tips are equipped with an anti-aerosol filter to prevent cross-contamination between samples, ensuring maximum security for your results. Made from tested polypropylene plastic, these tips also prevent DNA adsorption, eliminating concentration fluctuations and ensuring accurate, reliable measurements.

Ordering information

Cat. No.	Product	Content
FG-TP-10	10 µl short	10 racks with 96 tips

Cat. No.	Product	Content
FG-TP-20	20 µl	10 racks with 96 tips



Cat. No.	Product	Content
FG-TP-200	200 µl	10 racks with 96 tips

Cat. No.	Product	Content
FG-TP-10L	10 µl long	10 racks with 96 tips

Cat. No.	Product	Content
FG-TP-100	100 µl	10 racks with 96 tips

Cat. No.	Product	Content
FG-TP-1000	1000 µl	10 racks with 96 tips

FastGene® PCR Tubes

- **Compatible with most thermal cyclers**
- **Reproducible PCR results**
- **Free of RNase, DNase and human genomic DNA**
- **Different sizes and caps available**

Variety of PCR tubes for every need

We offer a range of PCR tubes to suit your specific needs for various PCR cyclers and applications, including 0.1 mL low profile tubes and 0.2 mL high profile tubes. The tubes and 8-well strips are available with different types of caps, such as cap strips or single caps attached to the tubes, in both domed or flat styles. For enhanced performance in real-time PCR and fluorescence applications, white strips are also available.

Highest quality without evaporation

FastGene® PCR tubes and 8-well strips are made from ultra-pure polypropylene, ensuring no protein binding and high durability with thin yet stable walls. Thanks to a unique manufacturing process and stringent QC procedures, these tubes offer excellent batch-to-batch reproducibility. They are also designed to prevent sample evaporation, particularly important for low-volume (5-10 µl) PCR, ensuring reliable, error-free results.

FG-088WFDE 8-well strips, premium quality Made in Germany

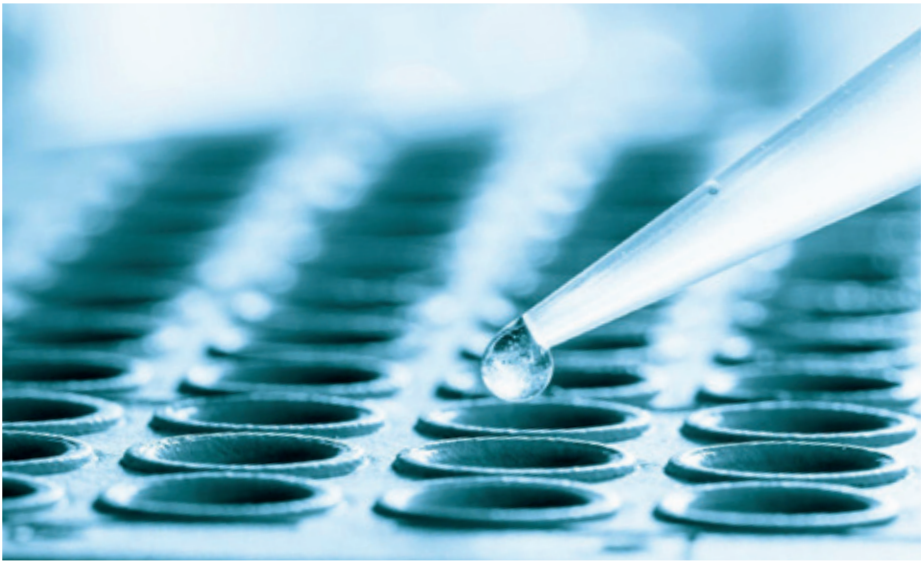
The FG-088WFDE tubes are high-quality PCR tubes manufactured in Germany, known for their exceptional reliability. Certified free from RNase, DNase, and human DNA, these tubes are designed with extremely thin walls for optimal heat transfer during PCR, while remaining sturdy and leak-proof. They are compatible with all standard PCR and qPCR applications. The "Made in Germany" label ensures top-notch quality, quick shipping, and dependable delivery worldwide. error-free results.

FastGene® PCR Tubes

Ordering information

Cat. No.	Product	Content	Image
0.1 mL individual PCR Tubes			
FG-011F	PCR single tubes 0.1 ml with flat caps	1000 pcs.	
0.1 mL PCR 8-well strips			
FG-018	8-well PCR Tube Strips 0.1 ml w/o cap	120 pcs.	
FG-017FC	8-well PCR Tube Strips 0.1 ml with Flat Cap Strips	120 pcs.	
FG-008FCP	Flat Cap Strips for 0.1 ml strips	120 pcs.	
FG-018WF	8-well PCR Tube Strips 0.1 ml with single flat caps	120 pcs.	
FG-019FC	White 8-well PCR Tube Strips 0.1 ml with Flat Cap Strips	125 pcs.	
FG-019FCJP	White 8-well PCR Tube Strips 0.1 ml with Flat Cap Strips JP	125 pcs.	
0.2 mL individual PCR Tubes			
FG-021D	PCR Tubes 0.2 ml with domed caps	1000 pcs.	
FG-021F	PCR Tubes 0.2 ml with flat caps	1000 pcs.	
0.2 mL PCR 8-well strips			
FG-028	8-well PCR Tube Strips 0.2 ml w/o caps	120 pcs.	
FG-008DC	Domed Cap Strips	120 pcs.	
FG-008FC	Flat Cap Strips for 0.2 ml strips	120 pcs.	
FG-016DC	8-well PCR Tube Strips 0.2 ml with Domed Cap Strips	120 pcs.	
FG-016FC	8-well PCR Tube Strips 0.2 ml with Flat Cap Strips	120 pcs.	
FG-088WD	8-well PCR Tube Strips 0.2 ml with single domed caps	120 pcs.	
FG-088WFDE	8-well PCR Tube Strips 0.2 ml with single flat caps DE (Made in Germany)	120 pcs.	

FastGene® PCR Plates



- **Compatible with most thermal cyclers**
- **Compatible with heat sealing foils**
- **Non-skirted, semi-skirted and full-skirted plates available**
- **Free of RNase, DNase and human genomic DNA**

Reliable Quality for Optimal PCR Performance

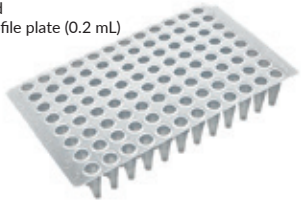
FastGene® PCR Plates are precision-manufactured and tested for compatibility with leading thermal cyclers. Their thin-walled design ensures optimal heat transfer, providing consistent and reliable reaction conditions. Made from ultra-pure polypropylene, these plates prevent protein binding and guarantee minimal sample interaction. A stringent quality control process ensures exceptional batch-to-batch reproducibility, making them a trusted choice for high-performance PCR applications.

Ordering information

Cat. No.	Product	Content
FG-170225	FastGene® 96-well PCR Plate 0.2 ml, non-skirted	25 pcs.
FG-190250	FastGene® 96-well PCR Plate 0.2 ml, semi-skirted	50 pcs.
FG-180250	FastGene® 96-well PCR Plate 0.2 ml, full-skirted	50 pcs.
FG-200250	FastGene® 96-well PCR ABI Plate 0.2 ml, semi-skirted	50 pcs.
FG-03890-50	FastGene® 96-well Fast PCR Plate 0.1 ml	50 pcs.
FG-210250	FastGene® White 96-well PCR Plate 0.1 ml, semi-skirted	50 pcs.
FG-170350	FastGene® 96-well PCR Plate 0.1 ml, non-skirted	50 pcs.
FG-300150	FastGene® 384 well Plate	50 pcs.

FastGene® PCR Plates

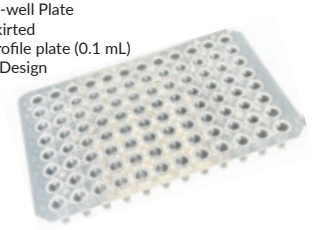
FastGene® 96-well Plate
- Non-skirted
- Normal-profile plate (0.2 mL)



"Easy to cut"

Cat. No.: FG-170225 (25 plates)

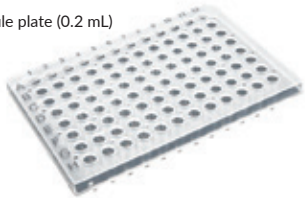
FastGene® 96-well Plate
- Non-skirted
- Low-profile plate (0.1 mL)
- Stable Design



Cat. No.: FG-170350 (50 plates)

"Very high plate stabiliy through cross-connected wells"

FastGene® 96-well Plate
- Semi-skirted
- Normal-profile plate (0.2 mL)

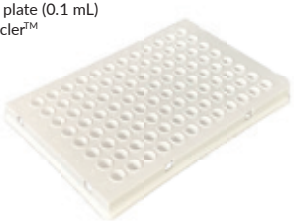


Cat. No.: FG-190250 (50 plates)

FastGene® 96-well Plate FROSTED ABI® style
- Semi-skirted
- Normal-profile plate (0.2 mL)
- Frosted plastic

Cat. No.: FG-200250 (50 plates)

FastGene® White 96-well Plate Roche® style
- Semi-skirted
- Low-profile plate (0.1 mL)
- For LightCycler™



Cat. No.: FG-210250 (50 plates)

FastGene® Fast 96-well Plate
- Semi-skirted
- Low-profile plate (0.1 mL)
- For ABI 7500 FAST

Cat. No.: FG-03890-50 (50 plates)

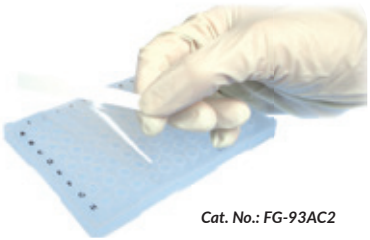
FastGene® 96-well Plate
- Full-skirted
- Low-profile plate (0.2 mL)

Cat. No.: FG-180250 (50 plates)

FastGene® 384-well Plate
- Full-skirted
- Volume 50 µl
- For ABI 7500 FAST

Cat. No.: FG-300150 (50 Plates)

FastGene® PCR Adhesive PCR Foil



Cat. No.: FG-93AC2

- 138 x 79 mm (with edge), 118 x 79 mm (without edge)
- Suitable for Real-Time PCR applications
- Suitable for PE, PS and PP plates
- Prevents evaporation during PCR or storage
- Without sticky residue after the seal is peeled off
- End tabs for easy removal
- Resistant to DMSO
- Can be used at temperatures from -80 °C to +120 °C

Ordering information

Cat. No.	Product	Content
FG-93AC2	FastGene® Adhesive PCR Foil	100 sheets

FastGene® PCR Adhesive Seal Aluminium

Cat. No.: FG-93AC2

- 141 mm x 79 mm (with edge) and 121 mm x 79 mm (adhesive area)
- Soft aluminium for high conformability
- For use between -70 °C and +100 °C
- Adheres well to a wide range of plate material (PE, PS, PP)
- Easily piercable
- Pressure sensitive acrylate adhesive on the other side

Ordering information

Cat. No.	Product	Content
FG-93AF	FastGene® Adhesive Seal Aluminium	100 sheets

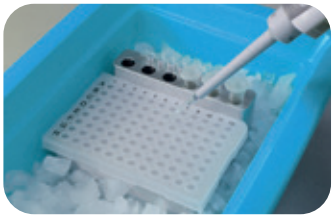
FastGene® Aluminium Rack

- Perfect for cooling tubes and plates on ice
- Holds semi-skirted or non-skirted 96 well plates
- Holds 6 reaction tubes and 8 PCR tubes

Reliable cooling and secure sample handling

The FastGene® Aluminium Rack is designed to keep your PCR plates and tubes cool and stable. It holds 1× 96-well PCR plate (semi or non-skirted), 6× reaction tubes, and 8× PCR tubes, ensuring a convenient setup for PCR and qPCR workflows. Made from premium-quality aluminium, the rack provides fast, uniform cooling—essential for preserving sensitive samples like PCR enzymes. No more tipping tubes or ice contamination—just secure, efficient cooling for improved experimental results.

The FastGene® Aluminium Rack conveniently and securly holds semi-skirted or non-skirted 96-well plates - also at room temperature.



The high quality aluminium block is the perfect tool to keep sensitive samples cool and secure on ice.

Ordering information

Cat. No.	Product	Content
FG-AR01	FastGene® Aluminium Rack	1x Rack for 1x 96 Well plate, 6 reaction tubes and 8 PCR tubes

FastGene® CapEasy

Effortless capping and decapping

The CapEasy tool simplifies your daily lab work by ensuring secure and hassle-free sealing of 8-well and 12-well PCR strip tubes. Manual capping can lead to sample loss, cross-contamination, and finger strain—CapEasy eliminates these issues with uniform pressure for a perfect seal, whether using domed or flat lids. When it's time to access your samples, the tool allows for smooth, one-motion lid removal, preventing spills and ensuring sample integrity.

PCR tube recommendation

0.1 ml PCR 8-well strips and flat cap strips
Cat. No.: FG-017FC

0.2 ml PCR 8-well strips and flat cap strips (120)
Cat. No.: FG-016FC

0.2 ml PCR 8-well strips and domed cap strips
Cat. No.: FG-016DC

Ordering information

Cat. No.	Product
FG-CDC02	FastGene® CapEasy

FastGene® 1.5 ml Reaction Tube

- Frosted lid and frosted side writing surface
- Graduations every 100 µl
- Thumb-friendly beveled lip, easy to open and close
- Autoclavable when open
- Compatible with all common micro centrifuges

Cat. No.: FG-015

FastGene® 2.0 ml Reaction Tube

- Frosted lid and frosted side writing surface
- Graduations every 500 µl
- Thumb-friendly beveled lip, easy to open and close
- Autoclavable when open
- Compatible with all common micro centrifuges

Cat. No.: FG-014

Ordering information

Cat. No.	Product	Content
FG-015	FastGene® 1.5 ml Reaction Tube	500 pcs.
FG-014	FastGene® 2 ml Reaction Tubes	500 pcs.

FastGene® Centrifuge Tubes

- Mix of five different cap colours
- Durable polypropylene
- Centrifugable up to 12,000 x g
- High temperature tolerance (-80 °C to 121 °C)
- Sterile, free from DNase, RNase, ATP and DNA

Bring more colour into your lab

What is special about the FastGene® Centrifuge Tubes? Each bag comes with a mix of 5 different colours. Make your laboratory life easier and use the colours to distinguish samples at a glance.

Uncompromising quality

FastGene® centrifuge tubes are crafted from highly durable polypropylene, ensuring exceptional stability across extreme temperatures (-80°C to 121°C) and resistance to centrifugal forces up to 12,000 g. Designed for reliable performance, they feature a large white labeling area for clear and easy sample identification—meeting the highest laboratory standards without compromise.

Both tube sizes (15 mL and 50 mL) have a large white writing area that makes clear and secure labelling possible.

FastGene® Centrifuge Tubes 15 mL with five different cap colours.

FastGene® Centrifuge Tubes 50 mL with five different cap colours.

Ordering information

Cat. No.	Product	Content
FG-CT15ML	FastGene® Centrifuge Tubes 15 mL	500 tubes (20 x 25 tubes)
FG-CT50ML	FastGene® Centrifuge Tubes 50 mL	500 tubes (20 x 25 tubes)

FastGene® Cryo Tubes

- **Cryopreservation of cells and tissues**
- **High temperature resistance: -196°C to +121°C**
- **Compatible with 2D barcode inserts**

Cryopreservation for cells and tissues

FastGene® Cryo Tubes ensure secure long-term storage in 1 ml or 2 ml volumes with optional 2D barcode inserts for easy tracking. Their self-standing, leak-proof design guarantees safety. FastGene® Cryo Racks follow the SBS format, enabling seamless integration into automated systems.

Cryo Tubes with external lid

1.0 ml Cryo Tubes with external lid
Cat. No.: FG-CRY-10S

2.0 ml Cryo Tubes with external lid
Cat. No.: FG-CRY-20S

Cryo Tubes with internal lid

1.0 ml Cryo Tubes with internal lid
Cat. No.: FG-CRY-In-10S

2.0 ml Cryo Tubes with internal lid
Cat. No.: FG-CRY-In-20S

Cryo Racks

Cryo Tube Racks in SBS format
Cat. No.: FG-CRY-10RC

Cryo Tube Racks in SBS format
Cat. No.: FG-CRY-20RC

2D-Inserts

2-D Inserts
Cat. No.: FG-CRY-2D

Ordering information

Cat. No.	Product	Content
FG-CRY-10S	FastGene® Cryo Tubes external lid (1 ml)	500 pcs.
FG-CRY-20S	FastGene® Cryo Tubes external lid (2 ml)	500 pcs.
FG-CRY-In-10S	FastGene® Cryo Tubes internal lid (1 ml)	500 pcs.
FG-CRY-In-20S	FastGene® Cryo Tubes internal lid (2 ml)	500 pcs.
FG-CRY-10RC	FastGene® Empty rack for 1 ml Cryotubes	10 racks
FG-CRY-20RC	FastGene® Empty rack for 2 ml Cryotubes	10 racks
FG-CRY-2D	FastGene® 2D BC inserts for Cryotubes	500 pcs.

FastGene® Screw Cap Tubes

Reliable cell storage with precision design

FastGene® Screw Cap Tubes ensure secure long-term storage of prokaryotic and eukaryotic cells, preserving valuable samples under extreme temperature conditions. Available in 2 ml and 0.5 ml sizes, they feature a convex inlay for easy integration of FastGene® 2D barcode inserts, ensuring efficient sample tracking.

The FastGene® Screw Cap Tubes are available in 5 different cap colours and 2 different volumes. Dark tubes for light protection are also available. The 2D barcodes enable easy tracking of stored tubes.

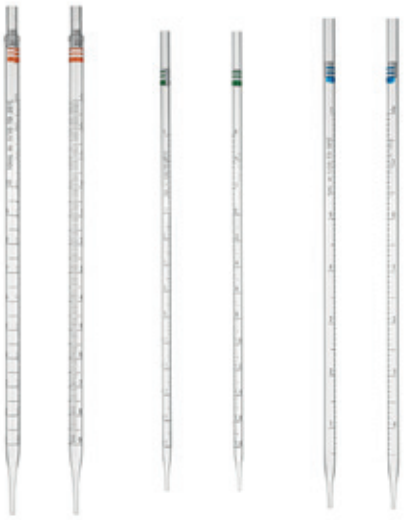
- **Small packaging units**
- **Temperature resistant from -80 °C to +121°C**
- **Compatible with 2D barcode inserts**

The FastGene® Tube Racks are SBS format compatible.

Ordering information

Cat. No.	Product	Description	Cap	Content
FG-SCT05-S	0.5 ml Screw Cap Tubes	clear tube, natural colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT05-RS	0.5 ml Screw Cap Tubes	clear tube, red colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT05-GS	0.5 ml Screw Cap Tubes	clear tube, green colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT05-BS	0.5 ml Screw Cap Tubes	clear tube, blue colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT05-YS	0.5 ml Screw Cap Tubes	clear tube, yellow colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT05-SHS	0.5 ml Screw Cap Tubes	dark tube with light protection, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-S	2 ml Screw Cap Tubes	clear tube, natural colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-RS	2 ml Screw Cap Tubes	clear tube, red colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-GS	2 ml Screw Cap Tubes	clear tube, green colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-BS	2 ml Screw Cap Tubes	clear tube, blue colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-YS	2 ml Screw Cap Tubes	clear tube, yellow colour cap, sterilized		500 tubes (20 x 25 tubes)
FG-SCT20-SHS	2 ml Screw Cap Tubes	dark tube with light protection, sterilized		500 tubes (20 x 25 tubes)
FG-SCR-RC	Tube Rack	Empty rack (red)	---	10 Racks for 48 tubes
FG-SCR-2D	2D Inserts	2D barcode Inserts	---	500 pcs.

FastGene® Serological Pipettes



Precision in liquid handling

FastGene® Serological Pipettes are designed for accurate liquid dispensing, ensuring optimal performance in cell culture, microbiology, and other lab applications. Made from high-quality polystyrene, they offer excellent compatibility with most pipettors for reliable and precise measurements.

Easy-to-read measurement

The pipettes allow precise aspiration and dispensing of liquids from 0.1 mL to 50 mL. Bold, bidirectional graduations ensure easy readability, while color-coded markings enable quick identification of different sizes for efficient lab work.

Sterile and contamination-Free

The pipettes are sterilized using e-beam irradiation and come equipped with high-quality filters, ensuring reliable, contamination-free liquid handling.

- Made from polystyrene
- Assembled with high quality filters
- Bidirectional graduations
- Sterile and free from RNase/DNase, Human DNA and pyrogens

The high-quality filters ensure reliable and contamination-free liquid handling.

The FastGene® Serologial Pipettes come in sterile packaging.

Ordering information

Cat. No.	Product	Content
FG-SP01	FastGene® Serological Pipettes 1 mL	1000 pcs. (50 pcs/pack, 20 packs/case)
FG-SP02	FastGene® Serological Pipettes 2 mL	1000 pcs. (50 pcs/pack, 20 packs/case)
FG-SP05	FastGene® Serological Pipettes 5 mL	200 pcs. (50 pcs/pack, 4 packs/case)
FG-SP10	FastGene® Serological Pipettes 10 mL	200 pcs. (50 pcs/pack, 4 packs/case)
FG-SP25	FastGene® Serological Pipettes 25 mL	200 pcs. (50 pcs/pack, 4 packs/case)
FG-SP50	FastGene® Serological Pipettes 50 mL	100 pcs. (25 pcs/pack, 20 packs/case)

FastGene® High-Throughput Plastic

Accessories for high-throughput applications

Our FastGene® High-Throughput Plastic includes deep-well plates, elution plates and tip comb plates, compatible with KingFisher™ automated sample purification systems. The accessories are used for the purification of nucleic acids with the help of automatic magnetic separation in high throughput.

FastGene® 96 Deep-well Plate for King Fisher™

- Deep well plates developed for magentic-bead based, automated nucleic acid purification workflows
- High quality polypropylene (PP)
- No nucleic acid or protein adherence
- Excellent recovery of magnetic beads due to well-design
- Well shape: Deep wells (up to 2.2 ml storage volume per well), square wells, V-bottom

FastGene® 96-well Tip Comb for King Fisher™

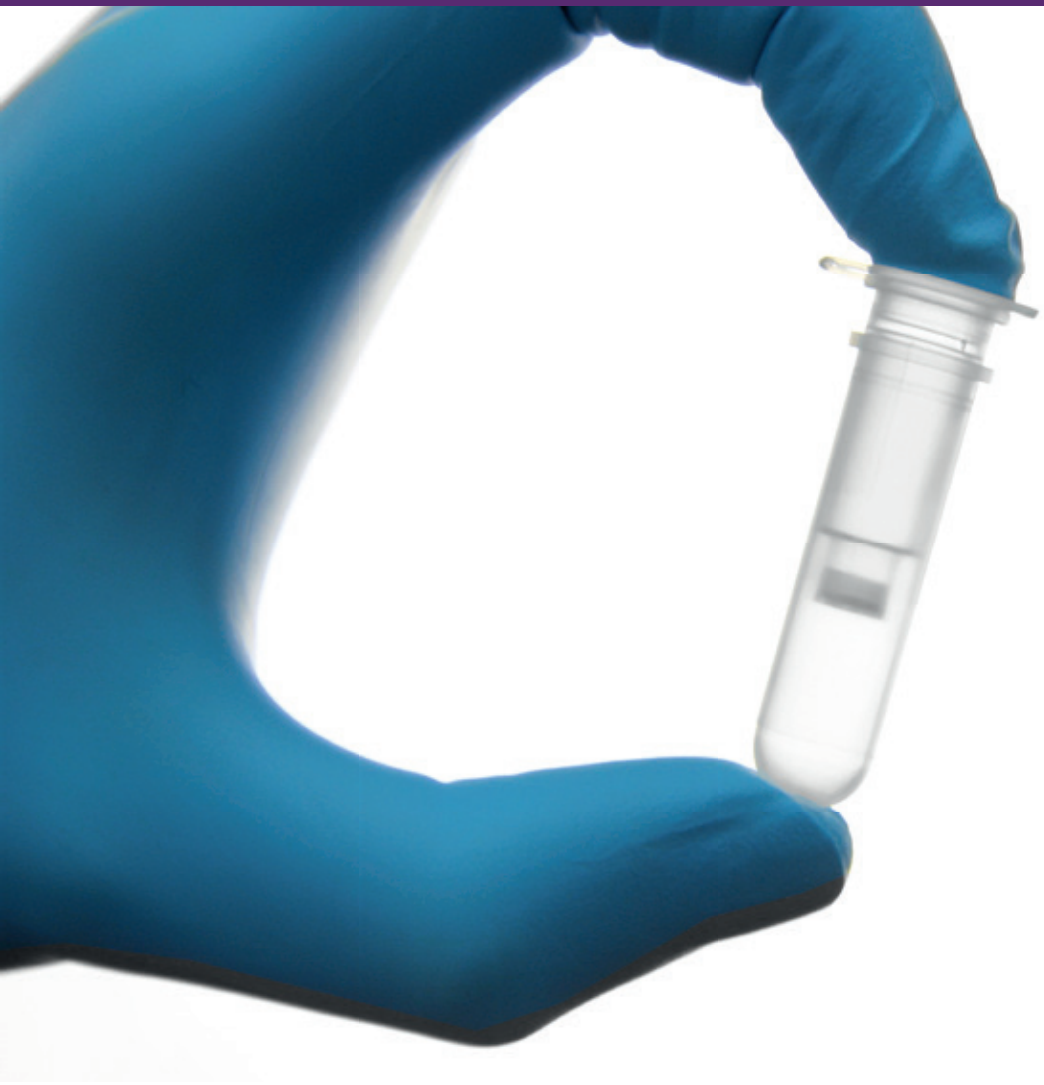
- Tip combs for magnetic separation platforms
- Serve as a cover for automation platform magnets and prevent sample carryover during purification procedure
- High quality polypropylene (PP)
- No nucleic acid or protein adherence
- Excellent recovery of magnetic beads due to well-design
- Size: 127.2 mm x 85.2 mm x 43.9 mm
- Well shape: round wells, V-bottom

FastGene® 96-well Elution Plate for King Fisher™

- Elution plates developed for magnetic-bead based, automated nucelic acid purifiaction workflows
- Low binding - Medical-grade quality polypropylene (PP)
- No nucleic acid or protein adherence
- Size: 127.5 mm x 85.35 mm x 15.1 mm
- Well shape: 0.5 ml, square wells, V-bottom

Ordering information

Cat. No.	Product	Content
FG-250150	FastGene® 96 Deep-well Plate for KingFisher™	50 pcs
FG-2502100	FastGene® 96-well Tip Comb for KingFisher™	100 pcs
FG-250350	FastGene® 96-well Elution Plate for KingFisher™	50 pcs



NUCLEIC ACID PURIFICATION

RNA Purification Kits 106
Plasmid Mini Kit 108
Gel/PCR Extraction Kit 109
Blood & Tissue Kit 110
Magna Stands – Magnetic Separation 111

FastGene® RNA Kits

- **Isolate RNA of the highest quality**
- **Use RNA for any downstream application**
- **Basic Kit - reliable and fast purification**
- **Premium Kit - ultrapure & concentrated RNA, free of genomic DNA**

FastGene® RNA Basic Kit for efficient RNA purification

The FastGene® RNA Basic Kit provides an efficient method for purifying total RNA from mammalian tissues and cultured cells. The isolated RNA is suitable for various downstream applications such as RT-PCR, qPCR, cDNA synthesis, northern blotting, next-generation sequencing, and more.

FastGene® RNA Basic Kit for efficient RNA purification.

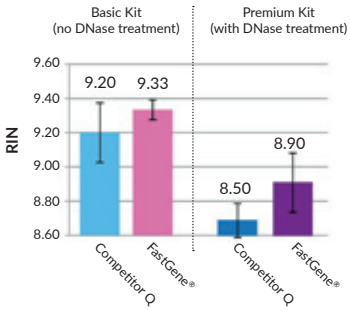
FastGene® RNA Premium Kit for enhanced DNA removal

For applications that require ultra-pure RNA, the FastGene® RNA Premium Kit offers optimized DNase I treatment combined with a specifically engineered mini-elute column. This advanced method ensures more efficient DNA removal by treating the liquid phase rather than the column membrane, increasing the effectiveness of DNase I. The smaller column diameter results in a higher RNA concentration and allows elution volumes as low as 10 µl.

FastGene® RNA Premium Kit for enhanced DNA removal.

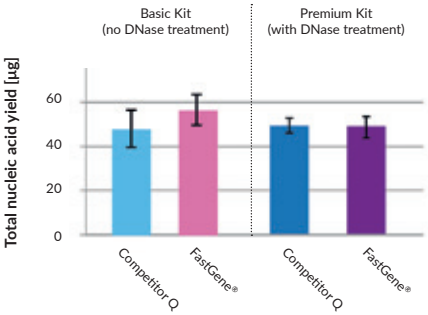
FastGene® RNA Kits

Quality (RIN Score)



RNA quality determination using an Agilent Bioanalyzer.
The FastGene® RNA Kits repeatedly deliver high quality RNA.

Yield



The FastGene® RNA Kits deliver very high yield.

High-purity RNA for reliable results

The FastGene® RNA Kits provide RNA of exceptional quality, measured by the RNA Integrity Number (RIN). A high RIN score (above 8, with 10 as the maximum) indicates intact RNA, essential for accurate downstream applications. The FastGene® RNA Basic and Premium Kits consistently achieve RNA purity comparable to market leaders, making them ideal for applications like reverse transcription.

High-yield RNA purification

Maximizing RNA yield is crucial for downstream applications. The FastGene® RNA Basic and Premium Kits provide exceptionally high total RNA yields, allowing multiple analyses from a single purification. Compared to leading competitors, the kits consistently deliver higher yields, demonstrating their optimized purification process.

Dr. Laura Rosanò
Institute of Molecular Biology and Pathology
Rome, Italy

★★★★★

"Great kit, really simple, clear and rapid protocol that permit to obtain high quality RNA in few centrifuge steps. RNA obtained (RIN 10 measured at QBIT) has been sequenced in NGS with very good results."

Ordering Information

Cat. No.	Product	Content
FG-80006	FastGene® RNA Basic Kit	6 Preps
FG-80050	FastGene® RNA Basic Kit	50 Preps
FG-80250	FastGene® RNA Basic Kit	250 Preps
FG-81006	FastGene® RNA Premium Kit	6 Preps
FG-81050	FastGene® RNA Premium Kit	50 Preps
FG-81250	FastGene® RNA Premium Kit	250 Preps

FastGene® Plasmid Mini Kit

- **High yields of plasmid DNA**
- **Optimum lysis protocol**
- **LB-Broth capsules included**

All-in-one convenience

The Kit includes all essential components for plasmid preparation, including ready-to-use LB-Broth capsules. Simply dissolve one capsule in 40 ml of water, autoclave, and start your cloning experiment. With everything provided in a single kit, plasmid preparation becomes more efficient and hassle-free.

Fast and efficient plasmid DNA purification

The FastGene® Plasmid Mini Kit enables rapid isolation of both high and low-copy plasmid DNA, delivering high-quality yields in a low-salt Tris buffer. The purified DNA is ready for cloning, sequencing, PCR, transformation, and restriction analysis. With an optimized protocol, the kit provides faster processing times than competitors while maintaining excellent yields, allowing for quicker downstream applications.

The FastGene® Plasmid Mini Kit contains LB-Broth capsules.

Ordering information

Cat. No.	Product	Content
FG-90402	FastGene® Plasmid Mini Kit	100 preps + 10 LB-Broth capsules
FG-90502	FastGene® Plasmid Mini Kit	300 preps + 10 LB-Broth capsules

FastGene® Gel/PCR Extraction Kit

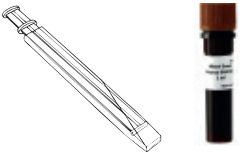
- **Very high recovery rate**
- **Fast and convenient procedure**
- **MIDORI^{Green} Advance and Gel Band Cutter included**

Dual-purpose DNA purification

The FastGene® Gel/PCR Extraction Kit efficiently extracts DNA from agarose gels and purifies PCR products in a single workflow. The purified DNA is immediately ready for downstream applications such as sequencing, ligation, transformation, restriction digestion, microarray analysis, PCR, and in vitro transcription.

Simple purification

The kit simplifies DNA purification with a quick bind-wash-elute process. Equipped with spin columns, buffers, and collection tubes, it efficiently isolates DNA fragments from 15 bp to 10 kb. The easy workflow ensures high recovery with an elution volume of 20-50 µl.



Each FastGene® Gel/PCR Extraction Kit includes 5 Agarose Gel Band Cutters and 50 µl MIDORIGreen Advance, providing everything needed for precise DNA fragment excision and purification.

Ordering information

Cat. No.	Product	Content
FG-91202	FastGene® Gel/PCR Extraction Kit	100 preps + 50 µl MIDORI^{Green} Advance + 5 Gel Band Cutter
FG-91302	FastGene® Gel/PCR Extraction Kit	300 preps + 50 µl MIDORI^{Green} Advance + 5 Gel Band Cutter

FastGene® Blood & Tissue gDNA Extraction Kit

- **Easy extraction protocol**
- **Proteinase K included**
- **Excellent gDNA yields with highest purity**
- **Blood, Tissue or cell culture - get your gDNA from any source**

Extract gDNA from blood, tissue or cells

The FastGene® Blood & Tissue gDNA Extraction Kit purifies genomic DNA from mammalian blood, tissue, and cultured cells using a simple extraction protocol.

High purity and excellent yields

The FastGene® Blood & Tissue gDNA Extraction Kit delivers high-purity DNA with optimal A260/A280 and A260/A230 ratios, ensuring reliability for downstream applications. It also provides high yields comparable to leading manufacturers.

Effortless gDNA extraction

Its simple protocol ensures DNA is ready for PCR, qPCR, Southern blot, and enzymatic reactions. The kit includes all necessary reagents, including lysis, wash, and elution buffers, Proteinase K, DNA binding columns, and collection tubes.

The FastGene® Blood & Tissue gDNA Extraction Kit delivers optimal A260/A280 and A260/A230 ratios compared to other gDNA kits.

Ordering information

Cat. No.	Product	Content
FG-70050	FastGene® Blood & Tissue gDNA Extraction Kit	50 preps
FG-70250	FastGene® Blood & Tissue gDNA Extraction Kit	250 preps

FastGene® Magna Stands

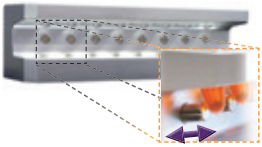
- **Strong neodymium magnet**
- **Optimal separation**
- **Smart design**

Precise side-position magnets

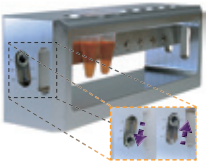
The FastGene® MagnaStand is designed to enhance magnetic bead-based purifications by positioning the pellet along the tube walls, preventing carry-over contamination. This allows for complete removal of the supernatant without disturbing the pellet. Additionally, the MagnaStand 1.5 features an adjustable vertical position, allowing precise placement of the magnets based on the volume used in the purification, making it a reliable tool recommended by leaders in NGS.

FastGene® MagnaStands provide a simple solution for purifying magnetic beads from small volumes. The beads are securely held along the tube wall, preventing accidental aspiration and ensuring a smooth, efficient purification process.

The 96-Well MagnaStand offers reliable magnetic bead purification for high-throughput applications. It provides optimal positioning for full- and half-skirted 96-well plates, enabling efficient purification from volumes as small as 5 µl, with an ultra-low elution volume version available (3 µl).



The 0.2 ml MagnaStand is designed with 8 adjustable magnets for 0.2 ml reaction tubes, allowing you to perform up to 8 purifications in parallel. It's perfect for DNA purification from small volumes, down to 3 µl, with adjustable magnet positions for optimal contact.

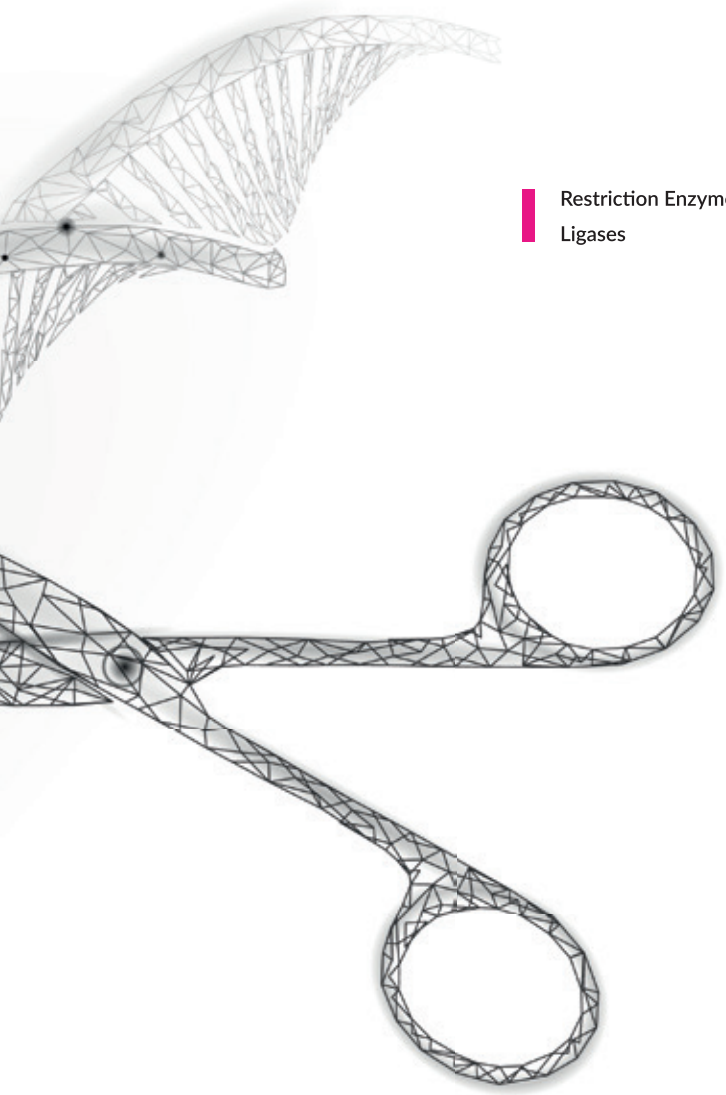


Featuring 8 ultra-strong, extra-large magnets, the 1.5 ml MagnaStand is perfect for purifying larger volumes, like recombinant proteins. Its adjustable magnet positions ensure efficient purification for varying sample volumes.

Ordering information

Cat. No.	Product	Size
FG-SSMAG96	96-Well FastGene® MagnaStand	96 Wells
FG-SSMAG96LV	96-Well FastGene® MagnaStand low volume	96 Wells
FG-SSMAG1.5	FastGene® 1.5 ml MagnaStand	8 x 1.5 ml
FG-SSMAG2	FastGene® 0.2 ml MagnaStand	8 x 0.2 ml

CLONING ENZYMES



Restriction Enzymes 114
Ligases 118

FastGene® Restriction Enzymes

- 115 restriction enzymes
- FastCut digestion in just 5-15 minutes
- Highest activity and purity

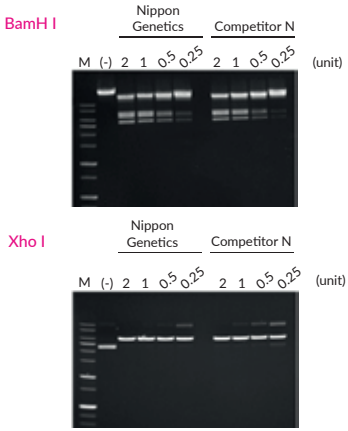
Excellent DNA cleaving activity

Restriction enzymes cleave double-stranded DNA at or near a specific recognition site. Our restriction enzymes deliver top-tier performance—at least as high as competitor N, the world market leader. So why pay more for the same results? With superb activity, high purity, and no star activity, our enzymes ensure reliable, satisfying outcomes.

Perfect for your cloning experiments

Our type II restriction enzymes cut DNA precisely within or near the recognition sequence. They generate either blunt ends by cutting both strands at the center or sticky ends by leaving staggered overhangs—ideal for efficient cloning.

Our restriction enzymes generate either blunt ends by cutting both strands at the center or sticky ends by leaving staggered overhangs.

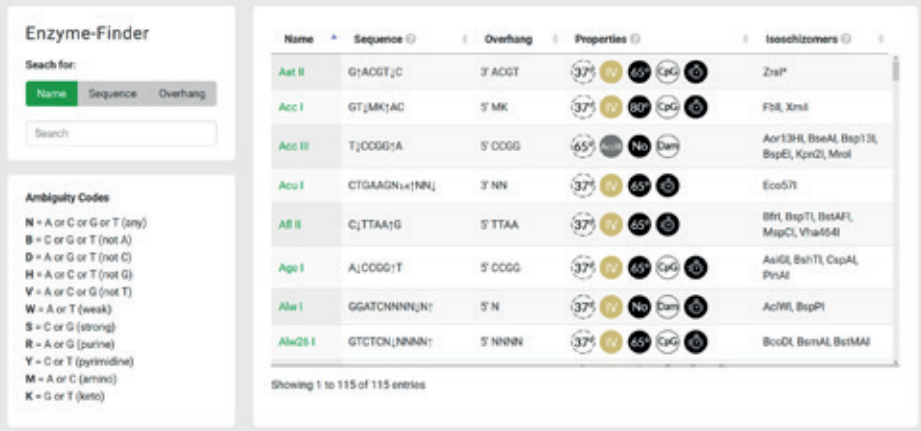


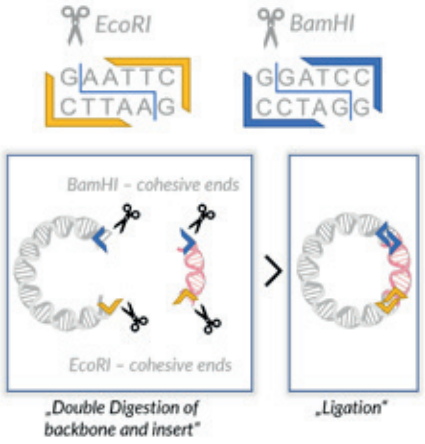
Our restriction enzymes (BamH I and Xho I) show the same activity as competitor N. M (Marker), (-) negative control.

FastGene® Restriction Enzymes

Find the right restriction enzyme with our Enzyme-Finder

Easily search for the perfect enzyme by name, recognition sequence, or overhang sequence. Our comprehensive list covers 115 restriction enzymes, including Isochizomers with identical recognition and cutting sites. Try it now:
www.nippongenetics.eu/en/enzyme-finder/





Our restriction enzymes generate either blunt ends by cutting both strands at the center or sticky ends by leaving staggered overhangs.

Digestion in just 5-15 minutes - The FastCut protocol

Our restriction enzymes come with the FastCut buffer for rapid digestion in just 5-15 minutes. Simply use 5-10 units per µg DNA and incubate at the recommended temperature for at least 5 minutes.

Double digestion for efficient cloning

Clone vector and insert DNA easily by using two different restriction enzymes, creating distinct overhangs. This prevents self-ligation and enhances cloning efficiency. With most of our enzymes fully active in the FastCut buffer, double digestion is straightforward and reliable.

Simplifying double digestion

1. Color-coded buffers – Choose a buffer where both enzymes have 100% activity. If unavailable, use a non-optimal buffer and adjust enzyme units or incubation time.
2. FastCut buffer – Most enzymes are fully active, making buffer selection easy.
3. Unique buffers – Some enzymes require specific buffers. Check the "Activity Chart of Common Restriction Enzymes" for the best choice.

FastGene® Restriction Enzymes

Ordering information

Enzyme	Cat. #	Sequence 5' → 3'	Enzyme Properties	Activity in FastGene Buffer [%]			
				I	II	III	IV
Aat II	FG-AatII	GACGT↓C	37° HF IV CutSmart	0	25	25	100
Acc I	FG-AccI	GT↓MKAC	37° HF IV CutSmart	75	100	100	100
Acc III*	FG-AccIII	T↓CCGGA	65° NE AccIII Buffer	0	25	100	0
Acu I	FG-AcuI	CTGAAGN$_{16}$↓	37° HS IV	50	50	75	100
Afl II	FG-AflII	C↓TTAAG	37° HS IV	75	100	75	100
Age I	FG-AgeI	A↓CCGGT	37° HS IV CutSmart	100	50	0	100
Alw I	FG-AlwI	GGATCNNNN↓N	37° HS IV Buffer 4	50	50	10	100
Alw26 I	FG-Alw26I	GTCTCN↓NNNN	37° HS IV CutSmart	75	100	50	100
Apa I	FG-ApaI	GGGCC↓C	37° HS IV CutSmart Buffer 4	100	25	0	100
ApaL I	FG-ApaLI	G↓TGCAC	37° NE IV CutSmart	50	100	50	100
Apo I	FG-ApoI	R↓AATTY	50° HF III	10	75	100	75
Asc I	FG-AscI	GG↓CGCGCC	37° HF IV CutSmart	0	0	0	100
Ava I	FG-AvaI	C↓YCGRG	37° HF IV CutSmart	25	100	100	100
Ava II	FG-AvaII	G↓GWCC	37° HF IV CutSmart Buffer 4	100	100	50	100
Avr II	FG-AvrII	C↓CTAGG	37° NE IV	100	50	50	100
Bal I*	FG-BalI	TGG↓CCA	37° HS Buffer 3	0	75	25	75
BamH I*	FG-BamHI	G↓GATCC	37° NE BamHI	75	100	100	100
Bcl I	FG-BclI	T↓GATCA	50° NE III Buffer 4	50	100	100	75
Bgl I	FG-BglI	GCCNNNN↓NGGC	37° HS III CutSmart	75	75	100	50
Bgl II	FG-BglII	A↓GATCT	37° HS III	10	75	100	10
Bsa I	FG-BsaI	GGTCTCN↓NNNN	37° HS IV CutSmart Buffer 4	50	100	100	100
BsaW I	FG-BsaWI	W↓CCGGW	60° HF IV	50	100	100	100
BsiW I	FG-BsiWI	C↓GTACG	55° HF III CutSmart	50	75	100	50
BsmB I	FG-BsmBI	CGTCTCN↓NNNN	55° HF III CutSmart	10	50	100	25
BsoB I	FG-BsoBI	C↓YCGRG	37° HF IV	10	100	100	100
BspE I	FG-BspEI	T↓CCGGA	37° HF III CutSmart Buffer 4	10	10	100	10
BsrF I	FG-BsrFI	R↓CCGGY	37° NE IV CutSmart	75	100	100	100
BstY I	FG-BstYI	R↓GATCY	60° NE II	50	100	75	100
BtsC I	FG-BtsCI	GGATGNN↓	50° HF IV	75	100	100	100
Cfr10 I*	FG-Cfr10I	R↓CCGGY	37° NE EcoRI CutSmart	10	10	10	25
Cfr42 I	FG-Cfr42I	CCGC↓GG	37° HS I CutSmart	100	50	25	75
Cfr9 I	FG-Cfr9I	C↓CCGGG	37° HS III EcoRI	0	0	100	0
Cla I	FG-ClaI	AT↓CGAT	37° HS IV CutSmart Buffer 4	50	75	75	100
CviA I	FG-CviAI	↓GATC	37° HS IV Buffer 4	10	50	10	100
Dde I	FG-DdeI	C↓TNAG	37° HS III CutSmart	25	50	100	50
Dpn I	FG-DpnI	GA↓TC	37° HF IV	75	100	100	100
Dpn II*	FG-DpnII	↓GATC	37° HS DpnII Buffer 4	25	75	100	75
Dra I	FG-DraI	TTT↓AAA	37° HS IV	75	100	50	100
Eag I	FG-EagI	C↓GGCCG	37° HS III CutSmart	10	25	100	10
Eco47 I	FG-Eco47I	G↓GWCC	37° HS III CutSmart Buffer 4	100	100	100	100
EcoN I	FG-EcoNI	CCTNN↓NNNAGG	37° HS IV	50	100	75	100
EcoO109 I	FG-EcoO109I	RG↓GNCCY	37° HS IV Buffer 4	50	75	100	100
EcoR I*	FG-EcoRI	G↓AATTC	37° HS EcoRI CutSmart	50	100	75	100
EcoR V	FG-EcoRV	GAT↓ATC	37° HF III CutSmart	0	100	100	50
EcoT38 I	FG-EcoT38I	GRGCY↓C	37° HS IV	75	100	0	100
Esp3 I	FG-Esp3I	CGTCTCN↓NNNN	37° HS IV CutSmart	25	50	10	100
Fok I	FG-FokI	GGATGN$_{12}$	37° HS IV CutSmart Buffer 4	100	100	10	100
Fsp I	FG-FspI	TGC↓GCA	37° NE IV CutSmart	75	100	50	100
Hae II	FG-HaeII	RGCGC↓Y	37° HF IV CutSmart	10	100	100	100
Hae III	FG-HaeIII	GG↓CC	37° HF IV	50	100	75	100
Hga I	FG-HgaI	GACGCN$_5$↓N$_4$	37° HS I CutSmart	100	75	10	100
Hinc II	FG-HincII	GTY↓RAC	37° HS IV CutSmart	75	50	50	100
Hind II	FG-HindII	GTY↓RAC	37° HS II CutSmart	100	100	50	100
Hind III	FG-HindIII	A↓AGCTT	37° HF II	25	100	75	100
Hinf I	FG-HinfI	G↓ANTC	37° HF IV CutSmart	50	100	100	100
HinP1 I	FG-HinP1I	G↓CGC	37° HS II CutSmart	50	100	100	75
Hpa I	FG-HpaI	GTT↓AAC	37° NE IV CutSmart	0	50	25	100
Hpa II	FG-HpaII	C↓CGG	37° HF IV CutSmart	100	75	50	100
Hph I	FG-HphI	GGTGAN7↓	37° HS IV Buffer 4	100	75	10	100
Hpy188 I	FG-Hpy188I	TCN↓GA	37° HS IV Buffer 4	50	75	50	100
Hpy99 I	FG-Hpy99I	CGWCG↓	37° HS IV CutSmart	100	25	10	100

FastGene® Restriction Enzymes

Enzyme	Cat. #	Sequence 5' → 3'	Enzyme Properties	Activity in FastGene Buffer [%]			
				I	II	III	IV
HpyCH4 V	FG-HpyCH4V	TG↓CA	37° 65° IV	75	100	25	100
Kpn I	FG-KpnI	GGTAC↓C	37° No I	100	50	0	100
Kpn2 I	FG-Kpn2I	T↓CCGGA	55° 80° I CpG	100	25	75	50
Lsp1109 I	FG-Lsp1109I	GCAGCN7↓N3	37° 65° III	25	75	100	100
Mbo I	FG-MboI	↓GATC	37° 65° III CpG Dam	75	100	100	100
Mbo II	FG-MboII	GAAGAN7↓	37° 65° II Dam	100	100	50	100
Mlu I	FG-MluI	A↓CGCGT	37° 80° III CpG	25	75	100	50
Mnl I	FG-MnlI	CCTCN6↓	37° 65° II	75	100	75	100
Mse I	FG-MseI	T↓TAA	37° 65° IV	75	100	100	100
Msp I	FG-MspI	C↓CGG	37° No IV	75	100	75	100
MspA1 I	FG-MspA1I	CMG↓CKG	37° 65° IV CpG	0	100	75	100
Mun I	FG-MunI	C↓AATTG	37° 65° II	100	100	10	100
Nae I	FG-NaeI	GCC↓GGC	37° No I CpG	100	100	25	100
Nco I	FG-NcoI	C↓CATGG	37° 80° III	50	100	100	75
Nde I	FG-NdeI	CA↓TATG	37° 65° IV	75	100	100	100
NgoM IV	FG-NgoMIV	G↓CCGGC	37° No IV CpG	25	75	0	100
Nhe I	FG-NheI	G↓CTAGC	37° 65° II CpG	100	100	10	100
Nla IV	FG-NlaIV	GGN↓NCC	37° 65° IV CpG Dcm	0	10	10	100
Not I	FG-NotI	GC↓GGCCGC	37° 65° III CpG	0	50	100	0
Nru I	FG-NruI	TCG↓CGA	37° No III CpG Dam	0	50	100	75
Nt.BstNB I	FG-NtBstNBI	GAGTCNNNN↓	55° 80° III	0	10	100	0
PaeR7 I	FG-PaeR7I	C↓TCGAG	37° No IV CpG	25	100	10	100
PflM I	FG-PflMI	CCANNNN↓NTGG	37° 65° III Dcm	0	100	100	50
Ple I	FG-PleI	GAGTCNNNN↓N	37° No IV CpG	75	75	50	100
PluT I	FG-PluTI	GGCGC↓C	37° No IV CpG	75	25	10	100
PspG I	FG-PspGI	↓CCWGG	37° No IV Dcm	25	100	75	100
Pst I	FG-PstI	CTGCA↓G	37° 80° III	100	100	100	75
Pvu I	FG-PvuI	CGAT↓CG	37° No III CpG	25	75	100	50
Pvu II	FG-PvuII	CAG↓CTG	37° No II	75	100	25	10
Rsa I	FG-RsaI	GT↓AC	37° No IV CpG	100	100	75	100
Sac I	FG-SacI	GAGCT↓C	37° 65° I	100	75	25	75
Sac II	FG-SacII	CCGC↓GG	37° 65° IV CpG	50	100	50	100
Sal I	FG-SalI	GTCGAC	37° 65° III CpG	0	0	100	0
Sau96 I	FG-Sau96I	G↓GNCC	37° 80° IV CpG Dcm	50	100	100	100
Sbf I	FG-SbfI	CCTGCA↓GG	37° 80° IV	50	25	10	100
Sca I	FG-ScaI	AGT↓ACT	37° 80° III	0	0	100	0
Sda I	FG-SdaI	CCTGCA↓GG	37° 80° IV	75	75	0	100
Sfi I	FG-SfiI	GGCCN3↓NGGCC	50° No II CpG Dcm	25	100	25	100
SgrA I	FG-SgrAI	CR↓CCGGYG	37° 65° IV CpG	100	100	0	100
Sma I	FG-SmaI	CCC↓GGG	25° 65° IV CpG	0	0	0	100
SnaB I	FG-SnaBI	TAC↓GTA	37° 80° IV CpG	100	75	25	100
Spe I	FG-SpeI	A↓CTAGT	37° 80° IV	50	100	75	100
Sph I	FG-SphI	GCATG↓C	37° 65° II	50	100	50	75
Sse9 I	FG-Sse9I	↓AATT	55° 65° I	100	50	50	75
Ssp I	FG-SspI	AAT↓ATT	37° 65° IV	50	100	25	100
Stu I	FG-StuI	AGG↓CCT	37° No IV Dam	75	100	75	100
StyD4 I	FG-StyD4I	↓CCNGG	37° 65° IV CpG Dcm	10	100	100	100
Swa I	FG-SwaI	ATTT↓AAAT	25° 65° III	75	75	100	25
Taq I	FG-TaqI	T↓CGA	65° 80° III Dam	50	100	100	100
TspM I	FG-TspMI	C↓CCGGG	75° No IV CpG	50	75	50	100
Tth111 I	FG-Tth111I	GACN↓NNGTC	65° No IV	25	100	100	100
Xba I	FG-XbaI	T↓CTAGA	37° 65° IV Dam	0	100	100	100
Xho I	FG-XhoI	C↓TCGAG	37° 80° IV CpG	50	100	100	100
Xma I	FG-XmaI	C↓CCGGG	37° 65° IV CpG	50	75	25	100

*Supplied with Unique Buffer

Chart Legend

25° 37° 50° 55° — Optimal reaction temperature

I II III IV — Supplied buffer

CpG Dcm Dam — Cleavage blocked or impaired by CpG, Dam or Dcm methylation

65° 80° — Thermal inactivation condition

No — Not heat inactivatable

FastCut protocol available

Bal I BamHI DpnII EcoRI — Supplied with unique buffer

FastGene® Ligases

- **Highest activity and purity**
- **5 min ligation using the Kickspeed Kit**
- **Supplied with optimal buffers**

Efficient DNA fragment ligation

The FastGene® T4 DNA Ligase joins DNA fragments by forming covalent bonds between 5′-phosphate and 3′-OH groups. It efficiently ligates both cohesive and blunt ends from restriction enzyme digestion.

Fast ligation in just 5 minutes

The FastGene® Kickspeed DNA Ligation Kit enables rapid DNA fragment ligation with cohesive ends in just 5 minutes at room temperature. The ready-to-use Kickspeed 2X DNA Ligation Mix allows a very quick reaction setup and fast ligation in even less than 5 minutes.

Applications

- Vector construction
- Linker ligation
- Fragment assembly
- Routine cloning

Ordering information

Cat. No.	Product	Content
FG-T4	FastGene® T4 DNA Ligase	20,000 units (400 U/µl)
FG-T4BP	FastGene® T4 DNA Ligase	100,000 units (400 U/µl)
FG-T4HC	FastGene® T4 DNA Ligase	100,000 units (2000 U/µl)
FG-LK30	FastGene® Kickspeed DNA Ligation kit	30 reactions
FG-LK60	FastGene® Kickspeed DNA Ligation kit	60 reactions
FG-LM50	FastGene® Kickspeed 2x DNA Ligation kit	50 reactions

Want to try it?

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info@nippongenetics.de

www.nippongenetics.eu

(q)PCR ENZYMES

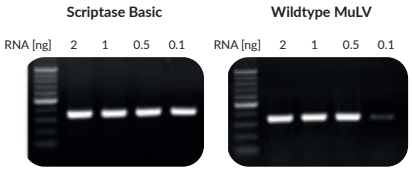
Scriptase Basic	122
Scriptase II	123
Scriptase III	124
Scriptase Overview	125
HIFI DNA Polymerase	126
Optima DNA Polymerase	127
Taq DNA Polymerase	128
DNAreleasy Advance	129
qPCR Mixes	130
One Step Probe with UDG	132

FastGene® Scriptase Basic

- Robust transcription enzyme
- Perfect for routine tasks
- Enzyme only or cDNA Synthesis Kit

Optimized for superior performance

The FastGene® Scriptase Basic is an improved version of Murine Leukemia Virus (MuLV) reverse transcriptase. It synthesizes cDNA like the wild type but with reduced RNase H activity and enhanced processivity. With increased robustness, it's ideal for large RNA quantities and easy templates.



The FastGene® Scriptase Basic shows higher sensitivity when compared to wildtype MuLV. The Scriptase Basic is able to produce a template from RNA concentrations as low as 0.1 ng.

Streamlined workflow

FastGene® Scriptase Basic enables seamless reverse transcription with a user-friendly protocol, making it an excellent choice for labs performing routine gene expression studies, cloning, and other molecular biology techniques.

Covers basic reverse transcription needs

- Ideal for standard applications where template quantity is not a critical factor
- Compatible with a range of RNA samples for consistent results
- Provides reliable performance for downstream PCR and qPCR experiments

Enzyme or kit

FastGene Scriptase Basic is available in two convenient formats:

- Enzyme-Only Format – Includes the core components needed for basic reverse transcription: enzyme, buffer, dNTPs, and sterile water.
- Complete cDNA Synthesis Kit – Includes all necessary reagents for flexible and efficient cDNA synthesis, including RNAse inhibitors, oligo(dT) and random hexamer primers, allowing reverse transcription from various RNA sources.

Ordering information

Cat. No.	Product	Content
LS52	FastGene® Scriptase Basic (20,000 units at 200 U/µl)	100 rxn - Includes: enzyme, buffer, dNTPs and sterile water
LS62	FastGene® Scriptase Basic cDNA Synthesis Kit	100 rxn - Kit includes: enzyme, buffer, dNTPs, sterile water, RNase inhibitor, oligo dTs and random hexamers

FastGene® Scriptase II

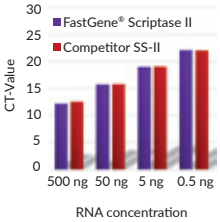
- Designed for lower RNA levels
- Reduced RNase H activity
- High yields of full-length cDNA

Lower RNase H activity for longer cDNA

With a modified RNase H domain, FastGene® Scriptase II preserves the RNA template, enabling cDNA synthesis up to 12 kBp in length.

Engineered for superior performance

FastGene® Scriptase II enables cDNA synthesis from very low RNA quantities. With mutations in the RNase H domain, it minimizes RNA degradation, ensuring higher yields of full-length cDNA. This results in high-quality templates for qPCR, NGS, and detecting modifications like splicing variants.



Comparison of qPCR results using primers for GAPDH produced by using different RNA starting concentration by FastGene® Scriptase II and competitor SS-II enzyme at 42°C.

Reverse transcription made easy

The FastGene® Scriptase II cDNA Synthesis 5x ReadyMix contains all necessary components in a single vial. Simply add it to your template and start the reaction—quick and hassle-free!

Flexible options to suit your needs

Choose from enzyme-only, a complete cDNA kit, or two ready-to-use mixes. The FastGene® Scriptase II cDNA Synthesis Kit includes everything needed for reverse transcription—enzyme, buffer, DTT, dNTPs, RNase inhibitor, random hexamers, and oligo dTs. The Scriptase II is also available in two 5x ready-to-use mixes:

- LS64 – Contains random hexamers, ideal for prokaryotic systems.
- LS65 – Includes random hexamers and oligo dT primers for binding poly(A) tails, perfect for eukaryotic systems.

Ordering information

Cat. No.	Product	Content
LS53	FastGene® Scriptase II (20.000 units at 200 U/µl)	100 rxn - Includes: enzyme, buffer, DTT, dNTPs and sterile water
LS63	FastGene® Scriptase II cDNA Synthesis Kit	100 rxn - Kit includes: enzyme, buffer, DTT, dNTPs, sterile water, RNase inhibitor, oligo dTs and random hexamers
LS64	FastGene® Scriptase II cDNA Synthesis 5x ReadyMix	100 rxn - Mix contains: enzyme, buffer, dNTPs, RNase inhibitor, random hexamers and helper protein
LS65	FastGene® Scriptase II cDNA Synthesis 5x ReadyMix OdT	100 rxn - Mix contains: enzyme, buffer, dNTPs, RNase inhibitor, random hexamers, helper protein and oligo dTs

FastGene® Scriptase III

- **Thermostable up to 55°C**
- **Highest productivity and sensitivity**
- **For complex applications and RNA secondary structures**

Engineered for structured RNA

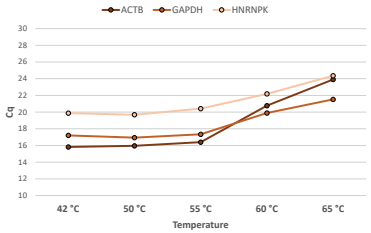
With enhanced robustness and thermostability, Scriptase III remains highly active at temperatures up to 55°C. This allows structured RNAs to unfold easily, making it ideal for complex applications like Real-Time PCR and NGS.

Masterful reverse transcriptase

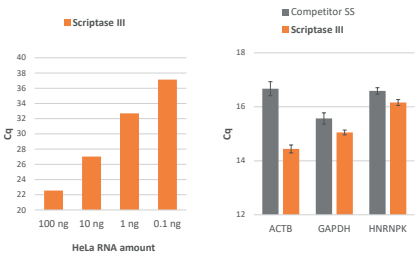
FastGene® Scriptase III is an advanced variant of Murine Leukemia Virus (MuLV) reverse transcriptase. Thanks to specific mutations in the RNase H domain, it enables cDNA synthesis from very small RNA amounts.

Designed for most advanced applications

- Gene expression quantification
- Real-Time PCR
- Next-generation sequencing (NGS)
- cDNA library construction
- Challenging RNA templates with strong secondary structures
- Very low RNA concentrations



The FastGene® Scriptase III works efficiently at elevated temperatures (~55°C), improving RNA accessibility and increasing reverse transcription sensitivity.



The FastGene® Scriptase III synthesizes cDNA from minimal template DNA (down to 0.1 ng RNA). It also generates high yields and concentrations of cDNA, increasing overall productivity.

Ordering information

Cat. No.	Product	Content
LS55	FastGene® Scriptase III (20.000 units at 200 U/µl)	100 rxn - Includes: enzyme, buffer, DTT, dNTPs and sterile water
LS66	FastGene® Scriptase III cDNA Synthesis Kit	100 rxn - Kit includes: enzyme, buffer, $MgCl_2$, DTT, dNTPs, sterile water, RNase inhibitor, oligo dTs and random hexamers
LS67	FastGene® Scriptase II cDNA Synthesis 5x ReadyMix	100 rxn - Mix contains: enzyme, buffer, dNTPs, RNase inhibitor Separate vials: oligo dTs, random hexamers

FastGene® Scriptase Overview

	Scriptase Basic		Scriptase II			Scriptase III		
	Enzyme LS52	cDNA Kit LS62	Enzyme LS53	cDNA Kit LS63	Ready Mix LS64/LS65	Enzyme LS55	cDNA Kit LS66	Ready Mix LS67
Working temperature	37-42 °C		37-42 °C			37-55 °C		
Working time	60 min		5 - 50 min			30- 60 min		
RNase H activity	Not reduced		Reduced			Reduced		
cDNA length	~ 5 kB		~ 12 kB			~ 12 kB		
Productivity (yield)	★★★		★★★★			★★★★★		
Sensitivity (input)	★★★		★★★★			★★★★★		
Applications	Easy templates, larger RNA amounts		More complex applications, low RNA amounts, long cDNA, fast reactions			Complex applications, low RNA amounts, long cDNA, RNA secondary structures		
Reaction format	Separate components		Separate components		Ready Mix	Separate components		Ready Mix

Want to try it?

Interested in testing our Scriptases? No problem! Just call or email us, and you'll have your enzymes in no time.

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FastGene® HiFi DNA Polymerase

- Extremely accurate and fast
- For challenging GC or AT rich sequences
- Amplifies up to 17.5 kb
- Master Mix with advanced buffer system

Perfect for challenging PCRs

The FastGene® HiFi Polymerase is the high fidelity enzyme for precise PCR amplifications. The enzyme was engineered in a way that it can amplify particularly long templates (up to 17.5 kb) with a high sequence accuracy. Furthermore, it shows a significant improvement in extension times (10-30 sec per kb), while generating high yields, even with difficult templates.

High fidelity is key

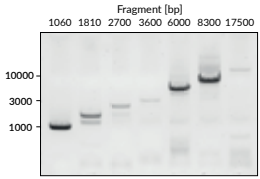
The high fidelity of the FastGene® HiFi polymerase is based on the improved 3`-5` exonuclease activity, which significantly reduces the error rate of the enzyme and makes it around 100 times more accurate than a Taq DNA polymerase.

Made for precise applications

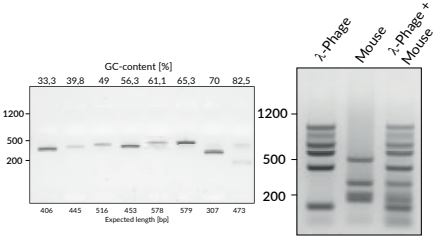
The FastGene® HiFi polymerase is working extremely accurate and fast. This is ideal for applications where high fidelity is essential, such as sequencing, cloning and site-directed mutagenesis.

Save time with the master mix

The FastGene® HiFi Polymerase is provided in a 2x Master Mix, which significantly speeds up the preparation of a PCR. It contains an advanced buffering system with dNTPs, Mg2+, reaction enhancers and the polymerase enzyme.



The FastGene® HiFi Polymerase Mix is capable of amplifying a long range of fragments, even up to 17,500 bp.



Left: Templates with varying GC-contect, ranging from ~30 % to ~80 % can be successfully amplified with the FastGene® HiFi Polymerase Mix. Right: The FastGene® HiFi Polymerase Mix can be used for multiplexing PCR. In this experiment, 6 phage DNA fragments, 4 mouse DNA fragments and a combination of both were successfully amplified in a single reaction mix.

Ordering information

Cat. No.	Product	Content
LS36	FastGene® HiFi 2x HS Master Mix	100 rxn

FastGene® Optima HotStart ReadyMix

HotStart enzyme

FastGene® Optima HotStart ReadyMix ensures low primer-dimers and easy room-temperature setup. Its proprietary antibody prevents unspecific reactions and is inactivated during the initial PCR step.
With all essential components and a loading dye for direct gel loading, just add your template and primers—ready to go!

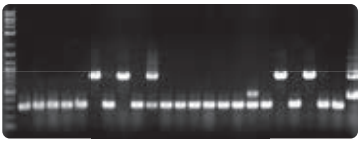
Robust performance for complex samples

FastGene® Optima excels with challenging templates. Its highly purified Taq polymerase ensures efficiency, while the proofreading polymerase guarantees fidelity. This powerful combination enables reliable amplification of complex tissues samples. Also GC-rich DNA can be challenging to amplify, but FastGene® Optima delivers exceptional efficiency.

Processivity, fidelity, and large fragments

FastGene® Optima Polymerase combines Taq polymerase with a modified type-B polymerase for exceptional proofreading. Purified through three chromatography steps, it offers high purity, activity, and robustness. Ideal for standard and challenging PCR, it easily amplifies long fragments over 7.5 kb.

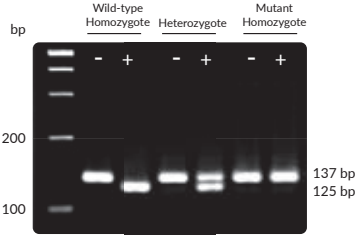
- **Proofreading HotStart DNA polymerase**
- **Convenient Ready Mix**
- **Suitable for GC-rich regions**
- **Amplifies up to 10 kB long templates**



FastGene® Optima HotStart ReadyMix enables rapid insert detection directly from E. coli colonies. It produces clear electrophoretic patterns without smearing and reliably amplifies clean products from each colony.

Applications

- RT-PCR
- Very complex templates
- GC-rich templates
- SNP Analysis
- Multiplex PCR
- Any standard PCR application

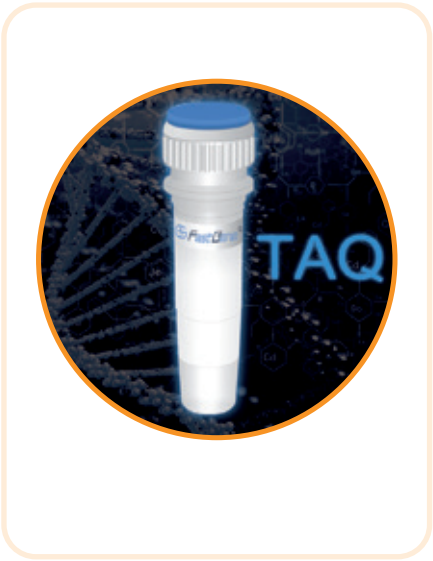


FastGene® Optima polymerase was used to analyze SNPs in the ALDH gene, linked to alcohol sensitivity. Homo- and heterozygous variants were identified by MboII digestion of the amplified products.

Ordering information

Cat. No.	Product	Content
LS29	FastGene® Optima HotStart ReadyMix	500 x 25 µl reactions (6.25 ml total volume)

FastGene® Taq DNA Polymerase



High-purity Taq polymerase

FastGene® DNA Polymerase is a highly purified wild-type Taq polymerase from Thermus aquaticus. Using three chromatography steps, it achieves exceptional purity and activity for reliable PCR performance.

Supplied with two reaction buffers

FastGene® DNA Polymerase is supplied with two reaction buffers to optimize performance. Buffer A is designed for high-yield amplification, making it ideal for most amplicons. Buffer B, a KCl-based buffer, offers higher sensitivity for specific applications.

Everything you need for your PCR

FastGene® Taq ReadyMix (2X) is a convenient, ready-to-use cocktail containing all PCR components, except for primers and template. It includes FastGene® Taq DNA polymerase, Taq buffer, dNTPs, MgCl2, and stabilizers, along with two inert tracking dyes.

FastGene® Taq reactions with 1X loading dye reaction buffer. (A) Volumes above wells indicate the volume of the PCR reaction loaded on the gel. (B) On a 1% agarose gel, the blue dye migration corresponds to a 5 kb DNA fragment, and the yellow dye migrates at 75 bp.

Dr. J. Wagner
PlantaLyt GmbH
Hannover, Germany

★★★★★

"We are happily using the FastGene® Taq DNA polymerase for over 12 months for routine SNP-analysis. We have chosen FastGene® Taq DNA polymerase since we needed a robust and reliable polymerase. We are very happy with it and the price-performance ratio is excellent!"

Ordering information

Cat. No.	Product	Content
LS21	FastGene® TAQ DNA polymerase	500 Units
LS22	FastGene® TAQ DNA polymerase	2000 Units
LS27	FastGene® Taq Ready Mix PCR Kit	250 x 50 µl reactions

DNAreleasy Advance

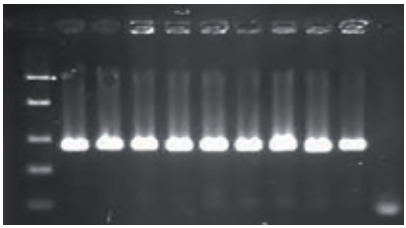
From cells to PCR in 15 minutes

Tired of time-consuming extractions and costly spin columns? The DNAreleasy Advance Direct Lysis Kit offers a faster solution. Simply incubate your sample for 15 minutes in a thermal cycler, and the DNA is ready to use directly in your PCR—no additional processing required!

Successfully used samples

- Saliva
- Hair roots
- Animal tissue (horse, pig liver, etc.)
- Mouse tails and ears
- Plants (leaf, blossom, pollem): Cabbage, maize, canola, soy, sugar beet, etc.
- Drosophila
- Yeast
- Mollusca

- **Very simple procedure**
- **Lysis of different biological material**
- **Get your DNA in 15 minutes**



Genomic DNA from scallops was isolated with DNAreleasy Advance, and a part of the supernatant was directly added to the PCR reaction. The agarose gel shows the high yield obtained.

Simple procedure

Easy DNA preparation with DNAreleasy Advance: Simply mix cells with 20 µl of the reagent and incubate at 65°C for 5 minutes, followed by 96°C for 5 minutes. After holding at 20°C for 5 minutes, the lysate is ready for use. You can add it directly to your PCR mix or store it at -20°C for future use.

Ordering information

Cat. No.	Product	Content
LS06	DNAreleasy Advance	1.5 ml, 50 reactions

FastGene® IC Green qPCR Universal Kit

- No reaction inhibition, higher sensitivity
- Universal compatibility
- Fast and robust chemistry

Faster and more accurate results

Designed for superior robustness, FastGene® IC Green ensures qPCR linearity and accuracy, leading to highly reproducible results. Its optimized buffer system also enables shorter amplification times, making fast protocols possible.

Compatible with all qPCR instruments

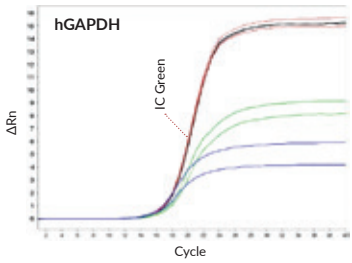
The FastGene® IC Green Kit is universally compatible with qPCR instruments. It includes separate reference dyes, allowing adaptation to instruments requiring high, low, or no ROX™. A special fluorescein version is also available.

No inhibition – Maximum sensitivity

Unlike SYBR® Green, which inhibits qPCR, FastGene® IC Green is a non-inhibiting intercalating dye that detects double-stranded DNA. This allows for lower CT values and higher sensitivity, enabling the detection of low-copy genes that other dyes may miss.

Applications

- Quantification of gene expression
- Quantification of gene copy number
- Melt-curve analysis
- Knock-out analysis



Comparison of FastGene® IC Green (black & red) with the market leading competitors KB (green) and T (blue). The differences of the C_T-values were under 1 cycle.

Ordering information

Cat. No.	Product	Content
LS4001	FastGene® 2x IC Green Universal (ROX™)	100 reactions
LS4005	FastGene® 2x IC Green Universal (ROX™)	500 reactions
LS4050	FastGene® 2x IC Green Universal (ROX™)	5000 reactions
LS4101	FastGene® 2x IC Green Universal (Fluorescein)	100 reactions
LS4105	FastGene® 2x IC Green Universal (Fluorescein)	500 reactions
LS4150	FastGene® 2x IC Green Universal (Fluorescein)	5000 reactions

FastGene® Probe qPCR Universal Kit

- Optimized for multiplexing
- Quicker qPCR reactions
- Accurate and reproducible results

Ideal for multiplex qPCR

The FastGene® Probe Universal Kit ensures high sensitivity and reliable performance for multiple targets. Its optimized buffer system allows efficient multiplex qPCR on any real-time PCR instrument.

Save valuable time

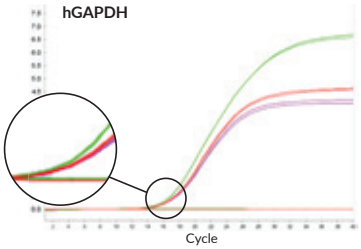
With a specially designed buffer composition, the FastGene® Probe Universal Kit supports fast qPCR protocols, reducing reaction time without compromising accuracy.

High accuracy and dynamic range

Using hydrolysis probes, the kit enables highly specific signal detection with minimal background fluorescence. Its superior buffer system, combined with optimal primer design, ensures high efficiency, reproducibility, and a broad dynamic range.

Applications

- Quantification of gene expression
- Quantification of gene copy number
- Multiplex qPCR
- SNP genotyping
- NGS validation



Reactions (25 µl) were set up with 25 ng of hgDNA as template, and 0.5 µM of each primer. PCR was performed for a total of 35 cycles. Green: Competitor KB. Red: Competitor T. Pink: Probe qPCR Universal Kit.

Ordering information

Cat. No.	Product	Content
LS4501	FastGene® 2x Probe Universal (ROX™)	100 reactions
LS4505	FastGene® 2x Probe Universal (ROX™)	500 reactions
LS4550	FastGene® 2x Probe Universal (ROX™)	5000 reactions

FastGene® One Step Probe with UDG

- One-step RT-qPCR, easy and efficient
- Ideal for multiplexing applications
- Built-in UDG prevents contamination

Contamination prevention with UDG

The FastGene® Probe One Step Mix with UDG includes dUTP and Uracil-DNA-Glycosylase (UDG) to eliminate carryover contamination. Before PCR starts, UDG degrades any unwanted DNA, ensuring only your target RNA is amplified for clean and accurate results.

Reverse transcription & PCR in one step

This 4x ready-to-use master mix streamlines your workflow by combining reverse transcription and PCR amplification in a single step. It reduces contamination risks and ensures more consistent results, making it ideal for multiplexing applications.

The FastGene® Probe One Step Mix combines two steps in a single reaction, saving time and reducing pipetting errors or contamination risks.

Applications

- Fast RNA quantification
- Gene deletion analysis
- Pathogen identification
- High-throughput SNP genotyping
- Linkage analysis

The FastGene® Probe One Step Mix prevents contamination by incorporating [U] instead of [T] into amplified DNA using dUTP building blocks. If aerosol, droplet, or pipette contamination occurs, the UDG enzyme digests any DNA containing [U], ensuring only template DNA with [T] remains. Before the next real-time PCR begins, UDG is inactivated by heat, maintaining reliable results.

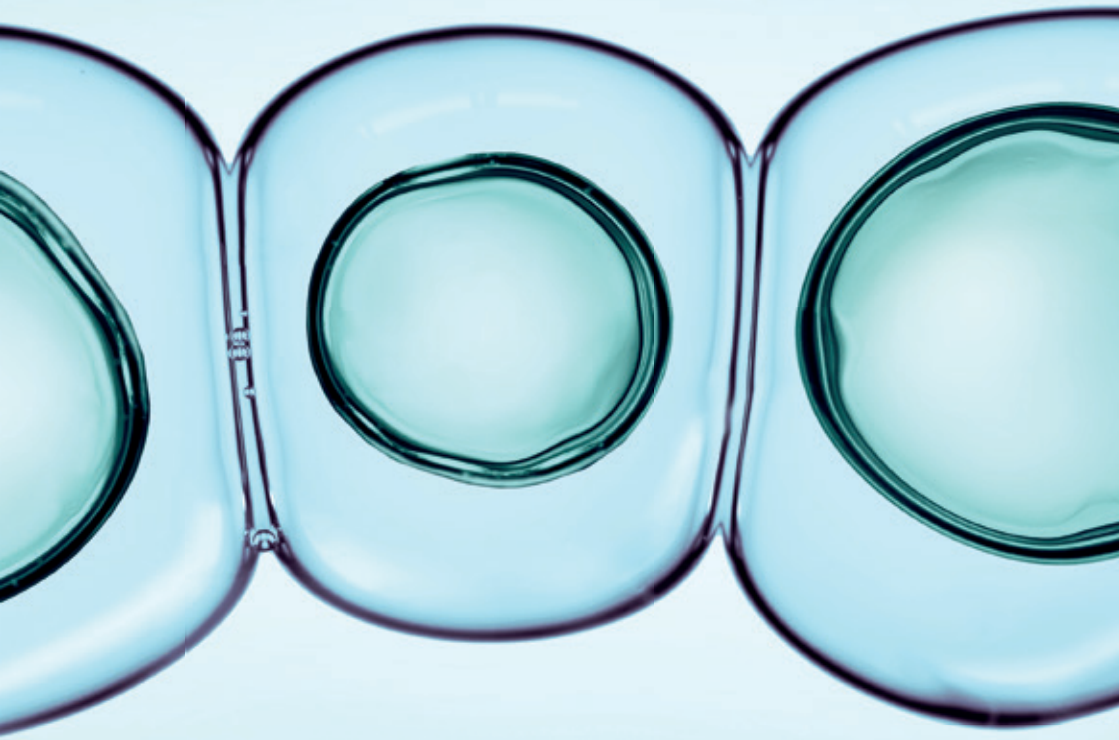
Ordering information

Cat. No.	Product	Content
LS4801	4x FastGene® One Step Probe with UDG	500 µl (100 reactions)
LS4805	4x FastGene® One Step Probe with UDG	2.5 ml (500 reactions)

Want to try it?

Interested in testing our qPCR reagents? No problem! Just call or email us, and you'll have your enzymes in no time.

+49 2421 554960
info@nippongenetics.de
www.nippongenetics.eu



CELL BIOLOGY

Bambanker™ Cell Freezing Media	136
Bambanker™	137
Bambanker™ HRM	138
Bambanker™ Direct	139
Bambanker™ DMSO Free	140
Cell Culture Chamber	141

Bambanker™ Cell Freezing Media

1

SERUM-FREE MEDIUM

Bambanker's serum-free formula ensures consistent, reliable cell viability, reduces contamination risk, and eliminates the variability associated with animal-derived serum.

2

NO STEP-WISE FREEZING

By eliminating step-wise freezing, Bambanker™ simplifies the process, saves time, and minimizes human error while ensuring high cell viability.

3

PRESERVE CELL HEALTH & FUNCTION

Bambanker™ ensures the highest cell viability and recovery, ensuring the success of your research by preserving cell health and function even after long-term storage.

4

QUICK & EASY PROTOCOL

Save time and optimize your workflow with Bambanker's straightforward protocol without compromising on cell viability and recovery.

5

GMP QUALITY

Produced in a GMP-compliant facility, Bambanker™ ensures consistent quality and reliability, giving you confidence in its safety and performance.

Dr. Alessandra Leone
Department of Virology and Cell Culture
IZSAM, Italy
★★★★★

"We have been using the Bambanker™ for several years, and with extreme satisfaction, to freeze our monolayer cell lines. We use it for several cell lines (BHK21, VERO, MDBK, TURB BOV...) and also for other cell lines more susceptible to freezing such as for example a primary line made in our laboratory. With the Bambanker™ we freeze at different temperatures, below -80°C and in nitrogen, and we have experienced greater recovery in less time than our previous freezing medium. We are very satisfied and will continue to use it."

>80+ cell lines successfully frozen with Bambanker™

>1 million samples are frozen with Bambanker™ each year

>200 peer-reviewed scientific publications for Bambanker™

Bambanker™

- Perfect for most cells
- Serum-free medium
- Directly freeze cells at -80 °C

Save time preserving your cells

Bambanker™ enables easy cryopreservation at -80°C or in liquid nitrogen—no expensive freezers or complex protocols needed. Simply resuspend cells in Bambanker™, transfer to a cryovial, and store. This ready-to-use, serum-free medium stays stable for two years and comes in convenient 20 ml bottles for individual lab use.

Freezing cells with Bambanker™ is quick and straightforward. Simply pellet the cells by centrifugation, remove the supernatant, resuspend in Bambanker™, transfer to a cryovial, and freeze directly at -80°C—no stepwise freezing required.

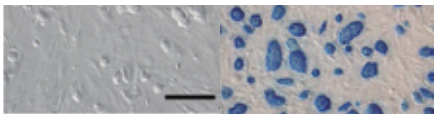
Perfect for most cells

Bambanker™ freezing medium ensures high cell survival with a simple, reliable protocol. Proven in over 80 cell line and tissue types and 200 publications, it outperforms conventional media—even for sensitive cells. Most cell types achieve over 50% survival, many exceeding 90%.

We have references for over 80 different cell line and tissue types successfully frozen with Bambanker. Get the comlete list on our Website: https://www.nippongenetics.eu/en/products/cell-biology/freezing-media/for-all-cell-lines/bambanker/

Serum-free for consistency and reliability

Unlike serum-based freezing media, Bambanker™ has a precisely defined composition, ensuring reproducible cell recovery and behavior after thawing. Serum variability can introduce inconsistencies, affecting experimental outcomes.



Two days after thawing, pluripotent stem cells remain highly viable with no morphological changes. Bambanker™ ensures stem cell preservation without inducing differentiation, as evidenced by strong alkaline phosphatase activity—an essential marker of pluripotency.

Ordering information

Cat. No.	Product	Content
BB05	Bambanker™	100 mL
BB02	Bambanker™	5 x 20 mL
BB03	Bambanker™	20 mL

Bambanker™ HRM

- Optimal for the cryopreservation of primate ES and iPS cells
- Made with human serum albumin
- No animal components - xeno-free medium

Best cryopreservation for ES and iPS cells

Primate embryonic stem (ES) cells and induced pluripotent stem (iPS) cells are highly sensitive to cryopreservation. Bambanker™ HRM is specifically designed for these fragile cells, providing superior storage and survivability.

Xeno-free formula for reliable results

Unlike conventional media, Bambanker™ HRM is completely free of bovine serum albumin and other animal-derived components, preventing unwanted cell differentiation. This xeno-free formulation ensures reproducibility and maintains stem cell integrity. Additionally, the freezing protocol is simple—cells can be frozen directly at -80°C without the need for gradual freezing steps.

Bambanker™ HRM was shown to be the most effective medium for cryopreserving human corneal endothelial cells, compared to six other commercially available solutions.

Success in corneal endothelial cell freezing

A study (PMID: 31226131) demonstrated the effectiveness of Bambanker™ HRM for cryopreserving human corneal endothelial cells. After 28 days of cultivation, cells preserved with Bambanker™ HRM showed the same viability as non-preserved cells, maintaining marker expression and forming contact-inhibited sheets. Additionally, cells stored with Bambanker™ and Bambanker™ HRM exhibited faster growth and the highest cell viability among six commercially available solutions. You can download the full reference note on our website.for gradual freezing steps.

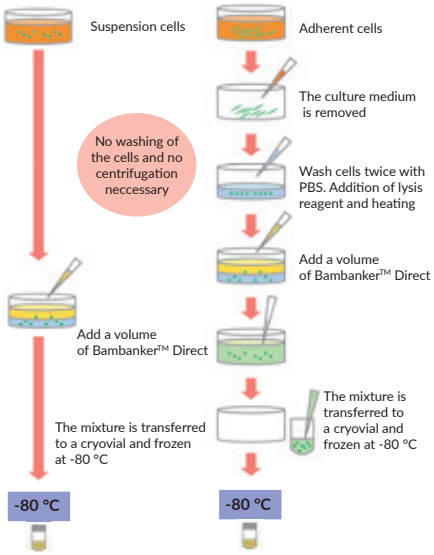
Scientist
Wand Lab, Stanford University
Standford, USA
★★★★★

"Bambanker™ HRM is a excellent product. We used for all our stem cell applications in our laboratory and for freezing sensitive cell lines. Viability and recovery in Bambanker HRM is >90% and the best part is that it is direct freeze reagent in -80 °C."

Ordering information

Cat. No.	Product	Content
BBH04	Bambanker™ HRM	100 mL
BBH01	Bambanker™ HRM	20 mL

Bambanker™ Direct



Bambanker™ Direct streamlines the freezing process by eliminating the centrifugation step. This is particularly beneficial for cells sensitive to mechanical stress, such as hybridomas. Additionally, it integrates seamlessly into automated freezing workflows, where centrifugation can be challenging.

- **No centrifugation step needed**
- **Made for cells that are sensitive to mechanical stress**
- **Ideal for automated systems**

Skip the centrifugation step

Bambanker™ Direct is designed for highly sensitive cells like hybridomas, minimizing stress during cryopreservation. Simply mix it with the culture medium at a 1:1 ratio and freeze immediately at -80°C—no centrifugation required. Its serum-free formulation ensures a consistent composition, providing optimal conditions for cell recovery and viability.

D. Iliev
Bulgarian Academy of Sciences
Sofia, Bulgaria
★★★★★

"We have had an excellent experience with Bambanker™ Direct! The freezing protocol is very easy and straightforward and allows us to quickly process large numbers of samples. In our protocol, we grow the single cell clones in 24 well plates. Upon reaching confluency, we trypsinize and we use 2/3 of the suspension for genotyping lysates and 1/3 of the suspension (50-70 000 cells) is mixed with an equal volume of Bambanker Direct (100 ul) and stored at -80 °C. So far all of the clones we have thawed and recultured have recovered very quickly. We have used clones kept frozen in Bambanker for several months and their viability has been excellent! Overall, this product gets my best recommendations!"

Ordering information

Cat. No.	Product	Content
BBD01	Bambanker™ Direct	20 ml

Bambanker™ DMSO-Free

Ideal for sensitive cells

While DMSO prevents ice crystal formation during freezing, it can be toxic to highly sensitive cells. Bambanker™ DMSO-Free eliminates this risk with a unique, DMSO-free formula that ensures optimal cell survival. Perfect for cell lines that cannot tolerate DMSO, it provides a safer cryopreservation solution.

Cells successfully frozen with DMSO-Free

The following cell lines have successfully been frozen with Bambanker™ DMSO-Free:

- Jurkat (Floating cells)
- PC12 (Adrenal Pheochromocytoma, Rat - Adhesive cells)
- HepG2 (Adhesive cells)
- Hela S3 (Epithelioid Carcinoma, Cervix, Human - Adhesive cells)
- HEK293T (Transformed Primary Embryonal Kidney, Human - Adhesive cells)
- OKT4 (Floating cells)
- Vero P4 (Kidney, African Green Monkey - Adhesive cells)
- MDCK (Kidney, Canine - Adhesive cells)
- NIH3T3 (Embryonic Fibroblast, Mouse - Adhesive cells)

- **Formula without DMSO**
- **Made for highly sensitive cells**
- **Same simple freezing procedure**

Scientist
Technical University Munich
Munich, Germany ★★★★★

"I needed a DMSO-free Medium for my very sensitive Mastcells and it worked very nice! The medium helped that after freezing and thawing the cells grow faster and have a higher viability. Nice product!"

Ordering information

Cat. No.	Product	Content
BBF01	Bambanker™ DMSO-Free	20 ml

FastGene® Cell Culture Chamber

- **Cell culture tray for cell protection**
- **Versatile - Usable with all standard plates, dishes and flasks**
- **Prevents contamination of your cells**

Shield your cells from contamination

Prevent infections and cross-contamination with the FastGene® Cell Culture Chamber. Designed to maintain a sterile environment, it protects your culture plates, dishes, and flasks in the incubator, under the cell culture hood, or during transport—ensuring the integrity of your research.

Safeguard your cell cultures

Cell culture is essential for modern biology, but microbial infections and cross-contamination can be devastating—especially for primary and stem cells. Contamination often occurs in the culture hood, incubator, or during transport. Despite careful sterile techniques, accidents happen, and a single infected vessel can quickly compromise an entire incubator. Preventing contamination is crucial to maintaining reliable research results.

Each FastGene® Cell Culture Chamber can fit numerous plates, dishes, and flasks making them ideal for labs with multiple users.

Ordering information

Cat. No.	Product	Content
CC01	FastGene® Cell Culture Chamber	1 x autoclavable chamber including filters
CC01F	Filters	Replacement set containing 4 x filters

Notes

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Notes