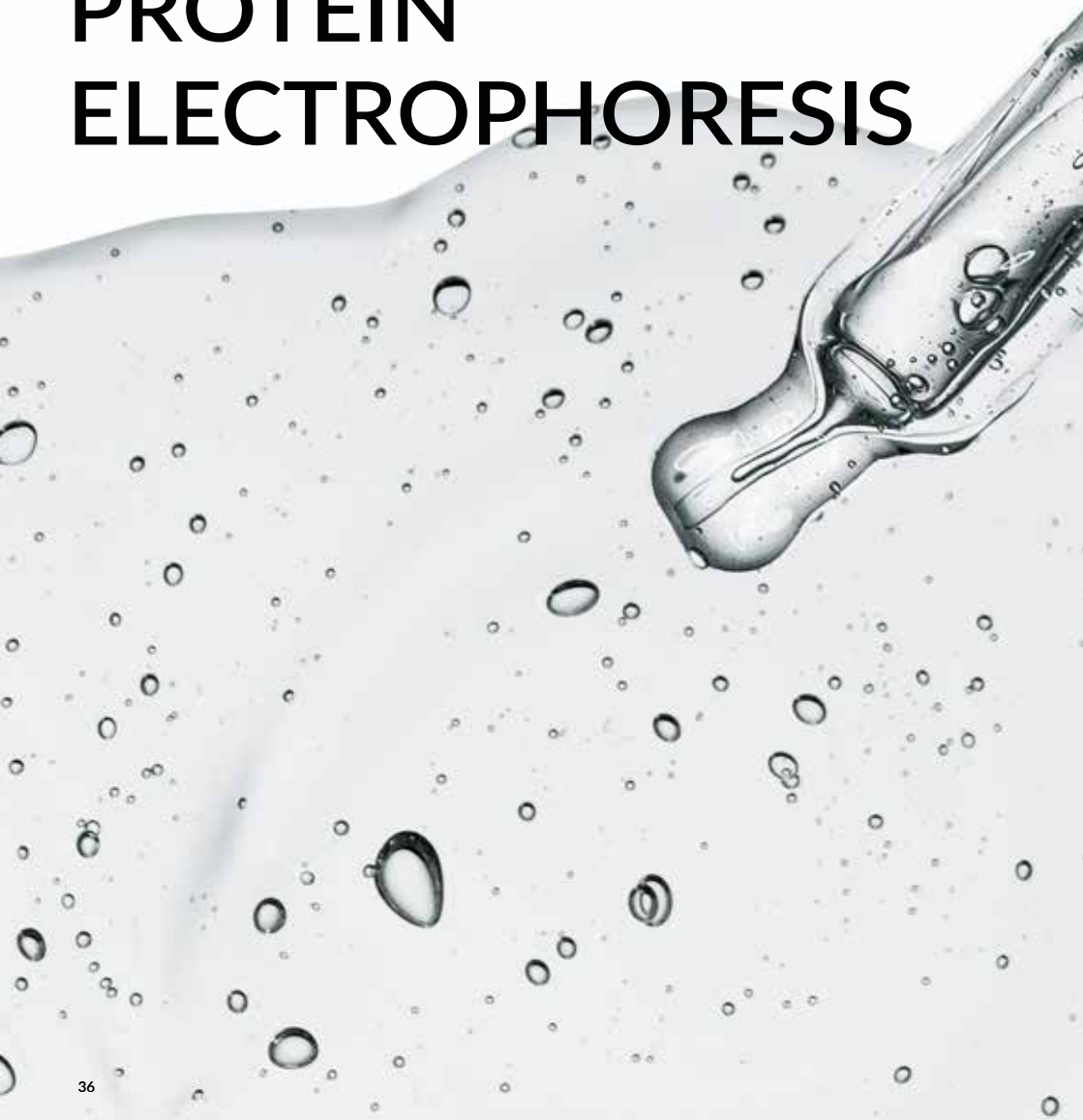


PROTEIN ELECTROPHORESIS





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FastGene® PAGE Protein System

All you need for PAGE protein analysis



New

- ✓ Innovative locking system
- ✓ Hand-cast gel set included (1 mm gels)
- ✓ Compatible with different pre-cast gels
- ✓ Includes glass plate holder and tube holder
- ✓ comes with convenient accessories

Powerful protein analysis via PAGE

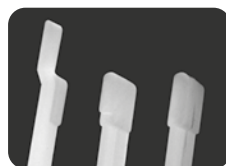
PAGE stands for Polyacrylamide Gel Electrophoresis and describes an analytical method in biochemistry for the separation of differently sized protein mixtures in an electric field. During PAGE, proteins migrate through a gel matrix in response to an applied electric field. Smaller proteins travel faster through the gel than larger proteins, leading to a size dependent separation.

All you need for PAGE protein separation

The FastGene® PAGE Protein System contains all the necessary components you need for PAGE protein analysis. The electrophoresis tank can hold a maximum of 4 gels simultaneously. The hand-casting set comes with everything needed for successful gel casting, and glass plate holder and tube holder are also included as practical accessories.

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.

Innovative locking system prevents leakage

The components of the FastGene® PAGE Protein System are equipped with innovative locking mechanisms. The closures are very robust and ensure extremely secure sealing of precast PAGE gels or glass plates. This means that you are safely protected against leakage of buffer or gel liquid.



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

FastGene® PAGE Protein System

All you need for PAGE protein analysis

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
Accessories	
Glass plate holder	1
Tube holder	1



The PAGE components of the FastGene® PAGE Protein System contain all necessary parts to carry out protein electrophoresis in a convenient way. Three sealing strip types ensure wide compatibility with different precast gel manufacturers.

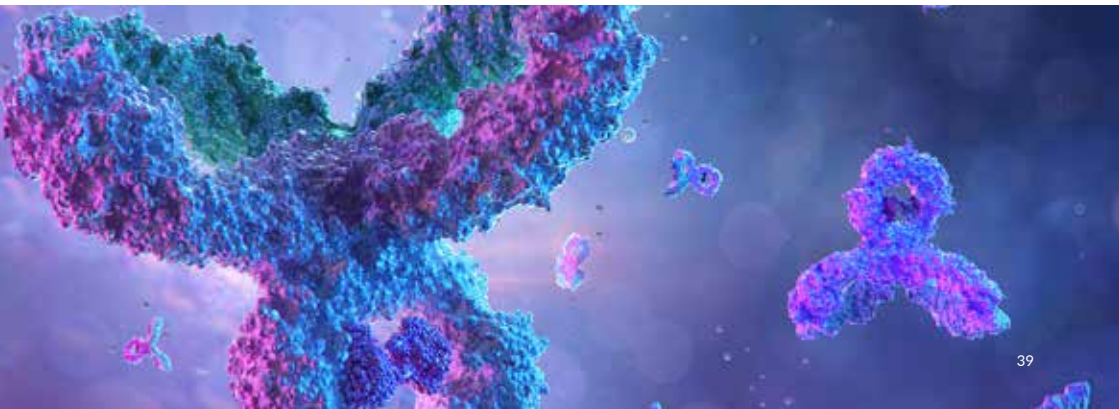


The gel hand-casting components of the FastGene® PAGE Protein System impresses with highly robust individual parts and easy handling. Up to 4 gels can be poured at the same time.



Simplify your daily work with the PAGE system with the glass plate holder and tube holder accessories.

New



FastGene® PAGE Protein System - Sets and single parts

The FastGene® PAGE protein system can be ordered as a complete set with all PAGE components, gel-hand casting components and accessories (PG01). In addition, there are further comb and plate sets for casting gels with different gel thicknesses (0.75 mm, 1 mm or 1.5 mm), as well as a matching gel casting set with all important components for casting gels. All individual single parts of the PAGE system can also be purchased 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)	

New

Do you have questions about our PAGE or blotting systems? Please do not hesitate to ask us! We offer product demonstrations online or in your lab. Just arrange an appointment with us!

+49 2421 554960

info@nippongenetics.de

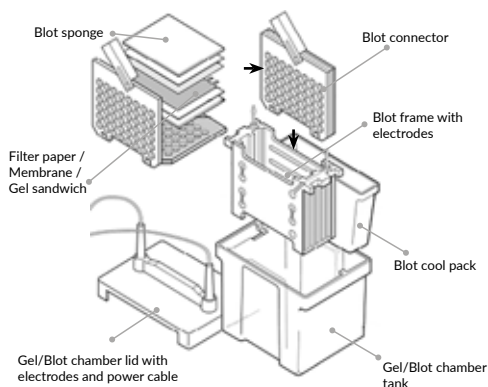
www.nippongenetics.eu

FastGene® Western Blot System Efficient wet-transfer device

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.

- ✓ **Efficient and reliable protein transfer**
- ✓ **Cooling pack absorbs transfer heat**
- ✓ **Can run two blots simultaneously**



Wet-transfer Western Blot system

The FastGene® Western Blot System is an efficient device to perform protein transfer step from gel to membrane via the wet transfer technique. The Western Blot Systems contains all the necessary components and comes with detailed guidelines to successfully perform transfer and Western Blot analysis. The system includes a cool pack, which is installed during the run. The cool pack absorbs generated running heat, avoiding the possibility of power loss. Gel and membrane can be easily sandwiched in the blot connector, which is assembled via an easy-to-use lock mechanism.

**Do you have a
FastGene® PAGE Protein System already?
Gear it up to a Western Blot System
with the PG09 set!**

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)	
PG14	Gel/Blot chamber lid with electrodes and power cable (1)	
PG05	Gel/Blot chamber tank (1)	

New

FastGene® Precast PAGE Gels

Get the best separation



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

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.



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

Load up to 60 µl sample on each lane

Superior running performance

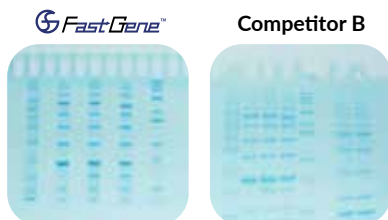
FastGene® Precast PAGE Gels are cast at a neutral pH. The hydrolysis of polyacrylamide is reduced, resulting in an increased gel stability and superior band resolution. Further advantages are optimised running performance and a larger loading volume (up to 60 µl). The extra large wells also prevent a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

FastGene® Precast PAGE Gels

Get the best separation

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 "smiles" 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.

[Would you like to test our gels?](#)

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

Like Coomassie Blue, but easier

The FastGene® Q-Stain is a single-step, modified Coomassie Blue protein gel stain for polyacrylamide gels. This protein staining solution eliminates the need to fix, wash or destain your protein gel. Just run your protein gel, add the FastGene® Q-Stain, and watch your bands appear in several seconds. The FastGene® Q-Stain does not stain the polyacrylamide gel. The result is a crystal-clear background with clearly visible protein bands. Unlike many other stains, the FastGene® Q-Stain is a water-based product, free of methanol and acetic acid.

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

Ideal for mass spectrometry

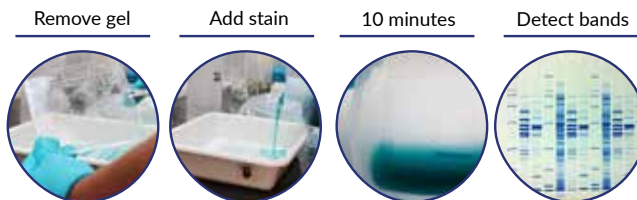
The FastGene® Q-Stain Protein Stain is 100% compatible with mass spectrometry. Follow the procedure below to analyse your protein:

1. Incubate the excised protein band in 1 ml 30% EtOH or 30% acetone for 30 min at room temperature
2. Repeat step 1 until the stain is removed
3. Continue with a typical mass spectrometry protocol

Never Wash or Destain again!

Staining a protein gel was never so easy

The entire staining procedure can be completed in about 10 minutes (for typical protein amounts). Just remove the gel after the electrophoresis, add the stain, wait for 10 minutes and watch your protein bands become visible.



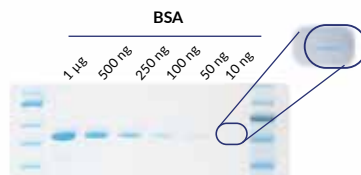
Ordering information

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



One-step protein staining in 10 minutes

The special formulation of the FastGene® Q-Stain enables a very quick staining procedure of protein gels. The protein bands will be visible in less than 10 minutes. Very low amounts of proteins (down to 10 ng) can be detected by longer staining. It is impossible to over-saturate proteins with the FastGene® Q-Stain, so longer incubation times have no negative effects. Save time by using Q-Stain for a safe and efficient detection of proteins in polyacrylamide gels.

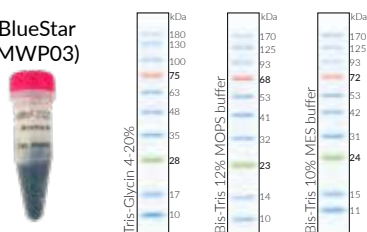


Detection of 10 ng of protein after 30 minutes incubation. For a better visualisation, the 10 ng protein band is shown with a stronger contrast.

FastGene® Protein Marker

- ✓ Huge size range (6.5 - 270 kDa)
- ✓ Ready-to-use with loading buffer
- ✓ Sharp bands
- ✓ Reference bands
- ✓ Quality tested

**BlueStar
(MWP03)**

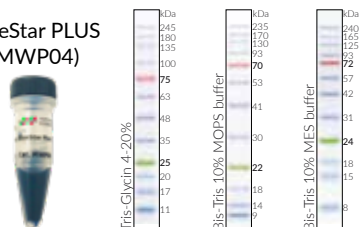


The BlueStar PLUS is a three colour protein standard with 12 prestained proteins covering a wide range of molecular weights from 10 to 245 kDa.

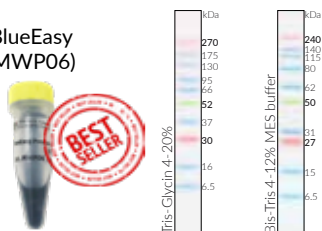
Excellent accuracy

Choose between three different protein markers with different colours and distinct size ranges. All of our Protein Markers are supplied in a loading buffer for a direct loading on gels. The FastGene® Protein Markers have sharp bands with an excellent accuracy. They are designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiencies (PVDF, nylon, or nitrocellulose membranes) and for approximating the size of proteins.

**BlueStar PLUS
(MWP04)**



**BlueEasy
(MWP06)**



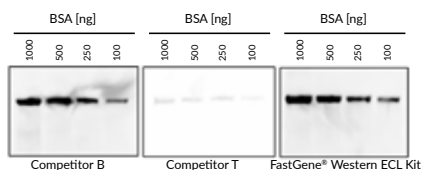
The BlueEasy Prestained Protein Marker is a three colour protein standard with 10 prestained proteins. It has the largest range of molecular weights from 6.5 to 270 kDa.

Ordering information

Cat. No.	Product	Content
MWP03	BlueStar Prestained Protein Marker (500 µl)	Sufficient for 100 mini gels or 50 large gels
MWP04	BlueStar PLUS Prestained Protein Marker (500 µl)	Sufficient for 100 mini gels or 50 large gels
MWP06	BlueEasy Prestained Protein Marker (500 µl)	Sufficient for 100 mini gels or 50 large gels

10

FastGene® Western ECL Kit



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.

Chemiluminescent western blot detection

The FastGene® Western ECL Kit is a luminol based enhanced chemiluminescent substrate and sensitive with conducting immunoblots with horseradish peroxidase (HRP) conjugated secondary antibodies. Due to the excellent substrate sensitivity and long signal duration, the FastGene® Western ECL Kit enables the detection of antigens with a very low concentration. Furthermore, its long chemiluminescent signal duration makes both digital and film-based imaging possible without any loss of signal.

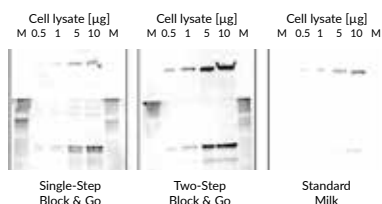


Workflow using the FastGene® Western ECL Kit: Mix the luminol solution and peroxide solution in a 1:1 ratio, and thoroughly agitate the chemiluminescent substrate solution for preparing the 0.1 ml of solution per cm² of membrane. Place the membrane with the protein side up and remove the membrane from the chemiluminescent substrate solution. Take an image of the membrane with 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



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 μ g whole-cell lysate.

Ordering information

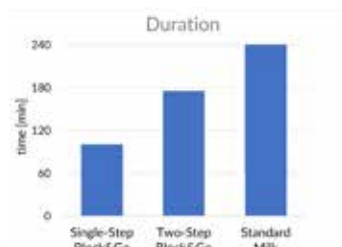
Cat. No.	Product	Content
FG-CH05	FastGene® Block & Go	500 ml solution

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 μ g of whole-cell protein lysate.

Save time and sample

With FastGene® Block & Go, western blot development is performed in a much quicker fashion. The solution can be used in a single-step or two-step protocol. The single-step protocol combines membrane blocking, primary antibody and secondary antibody incubation all in one step, saving more than half the time compared to conventional western blot development protocols.



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.