

Laboratory Plastic

Highest quality for best results



www.nippongenetics.eu





WE ARE NIPPON GENETICS EUROPE

NIPPON Genetics EUROPE is a Japanese-German life-tech company, which focuses on the development of cutting edge products for molecular and cell biology laboratories. We have over 30 years experience in the life-tech sector with offices in Tokyo and Kyoto, in Japan, as well as in Dueren, in Germany.

NIPPON Genetics EUROPE GmbH was founded in 2004. We are a growing group of highly motivated people with a strong background in life-science research. In the past few years, we have become a team that can support you not only with innovative products but also with advice on applications. This background also allows us to understand your needs and to develop new and exciting products for you.

)) The foundation of our business is contribution

Kazuo Yamazaki CEO of NIPPON Genetics Co. Ltd in Japan

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 enter our website and download everything you need. We are always happy to receive your feedback about our service and products.





PLASTIC QUALITY - MORE THAN JUST PLASTIC

The use of high quality plastic in scientific applications is a fundamental element for achieving reliable scientific results. NIPPON Genetics EUROPE provides best laboratory consumables. From filter tips to PCR plastic and storage tubes, we offer the tools to make your everyday laboratory work as easy and successful as possible.

All of our laboratory plastic is made from best suited laboratory materials. The manufacturing processes of the different types of consumables are subject to quality control of highest priority. Our filter tips, PCR plastic and storage tubes can handle large temperature differences and fluctuations and are guaranteed free from DNase, RNase and genomic DNA.



CUSTOMER TESTIMONIAL

We use the plastic already 2 years and are very satisfied. The price is unbeatable, and the quality compared to other expensive plastic from other manufacturers is comparable. Impeccable, clear recommendation.

Birgit Flechtner Institute for Zoology Innsbruck University









FastGene® PCR Plastic

The performance and reproducibility of PCR experiments is significantly influenced by the quality of the used plastic. Find the most suitable PCR plastic - 0.1 ml and 0.2 ml single PCR tubes, 8-well PCR strips or "low-profile" and "high-profile" PCR plates, - for your individual needs and perfect compatibility with your thermal cycler.

Read more on page 10

FastGene® High-Throughput Plastic

We offer accessory plastic for high throughput applications. Our 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.

Read more on page 16





OUR PORTFOLIO

All you need for successful lab-work

Using solid laboratory plastic with non-DNA-binding properties and high temperature tolerance is the everyday basis for delivering highest quality work. We at NIPPON Genetics EUROPE put great emphasis on best lab plastic quality and ensure DNase, RNase and gDNA-free consumables. Our products are compatible with a wide range of common laboratory instruments and devices such as PCR cyclers and pipettes. We offer consumables that are stable, reliable and easy to use.

FastGene® Accessories

We offer helpful, high-quality accessories that complement our Laboratory Plastic. The FastGene® Aluminium Rack is "Made in Germany" and is the perfect cooling device for tubes and plates on ice. The tidious job of opening and closing many PCR tubes belongs to the past, with the FastGene® CapEasy device.

Read more on page 17

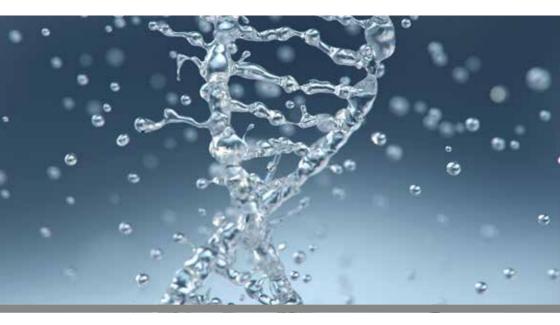


FastGene® Storage Tubes and Racks

Our FastGene® Screw Cap Tubes and FastGene® Cryo Tubes allow short-term and long-term storage of your valuable samples. We offer Screw Cap Tubes for two sample volumes, each with five different cap colours. They enable performing secure experiments over a long period of time. Cryo Tubes come in three different volumes and are the optimal solution for a safe and long storage of cryopeserved samples at very low temperature, down to - 191 °C. Both types of FastGene® Storage Tubes can be equipped with 2-D barcode inserts for optimal sample tracking.

Read more on page 18









FastGene® PCR Tubes

The FastGene® PCR Single Tubes and 8-well strips fulfill the highest standards of quality. They are available as 0.1 ml volume tubes and 0.2 ml volume tubes and can be closed with different kinds of cappings. Although the tubes are very thin-walled and can therefore conduct heat very quickly and effectively, the material is extremely stable and robust.

FastGene® PCR Plates

The FastGene® PCR Plates are manufactured from ultra pure polypropylene and are compatible with common thermal cyclers from leading manufacturers. The thinwalled design optimises heat transfer to the inside of the tube shaped wells. A very stringent quality control procedure guaratees a high experimental reproducibility of all PCR plates.



FASTGENE® PCR PLASTIC Get the best, reproducible PCR results

Over the past years PCR has become one of the most often used and best characterized bioenzymatic experiments. The performance and reproducibility of PCR results is significantly influenced by plastic quality. Our FastGene® PCR tubes and plates fulfill the highest manufacturing standards, made from ultra pure polypropylene.





CUSTOMER TESTIMONIAL

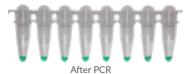
"The lid of the FastGene® 0.2 ml PCR tubes worked perfectly with the lock mechanism fo the RotorGene® Q MDx, although different from the original. The fluorescence of the probes in the reaction are measured at the tip of the tubes. We can recommend to replace the original tubes for the here tested fluorescent probes without any restriction. "











No Evaporation - PCR tube sealing test

The evaporation of samples is a well-known error factor depending on the quality of the PCR plastic. This is very important, especially for users that perform low volume PCR (5 - 10 μ). The evaporation test before and after a PCR experiment of FastGene® PCR Tubes proofs that they are tightly sealed and keep the entire PCR volume inside the tube. The PCR tubes are intensively tested, under very stringent conditions.







FastGene® 0.1 ml tubes and 0,1 ml 8-well strips

For 0.1 ml PCR tube size we offer colorless single tubes as well as colorless or white 8-well strips, either with attached individual flat caps or flat lid strips. They are suitable for all standard PCR and qPCR applications, starting at a reaction volume of 5 μ l. All tubes and strips are free from RNases, DNases and genomic DNA and have an extremely thin-walled and tight design.

FastGene® 0.2 ml tubes and 0.2 ml 8-well strips

For 0.2 ml PCR tube size we offer colorless single tubes with flat caps or domed caps as well as colorless 8-well strips, either with attached individual flat caps/domed caps or flat/domed lid strips. They are suitable for all standard PCR and qPCR applications, starting at a reaction volume of 5 μ l. All tubes and strips are free from RNases, DNases and genomic DNA and have an extremely thin-walled and tight design.

FastGene® PCR tubes Compatibility List



All tubes are compatible with a wide range of thermal cycles from leading manfacturers. Have a look at our website for a complete and detailed compatibility list of the FastGene® PCR tubes.

Ordering information

| Cat. No. | Product | | Content | |
|----------------------------|---|----------------|--------------------|--|
| FastGene® 0.1 ml PCR tubes | | | | |
| FG-011F | 0.1 ml PCR single tubes with flat caps | V | 1000 tubes | |
| FG-017FC | 0.1 ml PCR 8-well strips and flat cap strips | THINK | 120 strips each | |
| FG-018 | 0.1 ml PCR 8-well strips | 11111111 | 120 strips | |
| FG-018WF | 0.1 ml PCR 8-well strips with single flat caps | TTTTTTTT | 120 strips | |
| FG-008FCP | 0.1 ml flat cap strips | | 120 strips | |
| FG-019FC | $0.1 \mbox{ ml PCR 8-well white tube strips with flat cap strips }$ | | 125 strips each | |
| FastGene® 0.2 ml P0 | CR tubes | | | |
| FG-021F | 0.2 ml PCR single tubes with flat caps | 1 | 1000 tubes | |
| FG-021D | 0.2 ml PCR single tubes with domed caps | | 1000 tubes | |
| FG-088WF | 0.2 ml PCR 8-well strips with single flat caps | Willi | 120 strips | |
| FG-088WD | 0.2 ml PCR 8-well strips with single domed caps | TWW | 120 strips | |
| FG-028 | 0.2 ml PCR 8-well strips without caps | WWWWWWW | 120 strips | |
| FG-008FC | 0.2 ml flat cap strips | | 120 strips | |
| FG-008DC | 0.2 ml domed cap strips | "皇帝帝帝帝帝帝帝" | 120 strips | |
| FG-016FC | 0.2 ml PCR 8-well strips and flat cap strips | WWWWW ARREST | 120 strips each | |
| FG-016DC | 0.2 ml PCR 8-well strips and domed cap strips | WWWWW | 120 strips each | |



CUSTOMER TESTIMONIAL

Very high quality. The Lid sits well, and the removal is easy. You get exactly what you want.

Online Custome





FastGene® PCR plates

We offer non-skirted, semi-skirted and full-skirted 96well PCR plates in different shapes and sizes as well as a 384-well plate, for various PCR and qPCR applications. The plates are compatible with a wide range of thermal cyclers from leading manfacturers. Have a look at our website for a complete and detailed compatibility list of the FastGene PCR plates.

FastGene® PCR plate Compatibility List





FG-170225

- 96 wel
- Normal-profile plate
- INON-SKIFTED
 Easy to cut
- 25 plates
- zo plates



FG-170350

- 96 wells
- Low-profile plate
- Non-skirted
- 50 plates





FG-190250

96 well

•

- Normal-profile pla
 Semi-skirted
- Semi-skirted
- 50 plates



FG-200250

96 wells

.

- Normal-profile plate
- Semi-skirted
- FROSTED ABI® Style
- 50 plates



FG-210250

- Low-profile plate
- Semi-skirted
- Roche®/Bio-Rad® Style
- For LightCycler[™]
- 50 plates



FG-03890-50

- 96 wells
- Low-profile plate
- Semi-skirted
- For ABI 7500 FAS
- 50 plates



FG-180250

- 96 wells
- Low-profile plat
- Full-skirted
- 50 plates



FG-300150

- 384 wells
- Full-skirted
- 50 μl volume
- For ABI 7500 FAS
- 50 plates

FG-3110MS

- Silicon sealing matter
- For 384-well plat
- Soft structure
- 10 matts

| Cat. No. | Product | Content |
|----------------------|--|--------------|
| FastGene® PCR plates | | |
| FG-170225 | FastGene® 96-well Plate, Normal-profile plate, Non-skirted | 25 plates |
| FG-170350 | FastGene® 96-well Plate, Low-profile plate, Non-skirted | 50 plates |
| FG-190250 | FastGene® 96-well Plate, Normal-profile plate, Semi-skirted | 50 plates |
| FG-200250 | FastGene® 96-well Plate FROSTED ABI® style, Normal-profile plate, Semi-skirted | 50 plates |
| FG-210250 | FastGene® White 96-well Plate Roche® style, Low-profile plate, Semi-skirted | 50 plates |
| FG-03890-50 | FastGene® Fast 96-well Plate, Low-profile plate, Semi-skirted | 50 plates |
| FG-180250 | FastGene [®] 96-well Plate, Low-profile plate, Full-skirted | 50 plates |
| FG-300150 | FastGene® 384-well Plate, Full-skirted, Volume 50 μl | 50 Plates |
| FG-3110MS | FastGene® Silicon sealing mat (soft) | 10 Mats soft |



FASTGENE® HIGH-THROUGHPUT PLASTIC Plastic Accessories for high throughput applications



Our High-Throughput plastic accessories include deep-well plates, elution plates and tip comb plates and are 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.

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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
- 50 plates per box

FastGene[®] 96 Deep 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-bottor
- 100 tip combs per box

FastGene[®] 96 Elution Plate for King fisher[™]

- Elution plates developed for magnetic-bead based, automated nucleic 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
- 50 plates per box

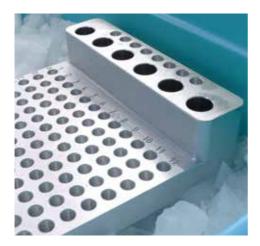
| Cat. No. | Product | Content |
|---------------------------|--|---------------|
| FastGene® High-Throughput | Plastic | |
| FG-250150 | FastGene® 96 Deep-well Plate for KingFisher™ | 50 plates |
| FG-2502100 | FastGene [®] 96-well Tip Comb for KingFisher™ | 100 tip combs |
| FG-250350 | FastGene® 96-well Elution Plate for KingFisher™I | 50 plates |





ACCESSORIES Helpful complements for your laboratory plastic

High-quality accessories can be supportive in routine laboratory work. Accompany PCR tubes and PCR plates with the "Made in Germany" FastGene® Aluminium Rack, the perfect cooling device on ice. Seal or open lids of 8-well (or 12-well) PCR tube strips simultanously, with the FastGene® CapEasy.





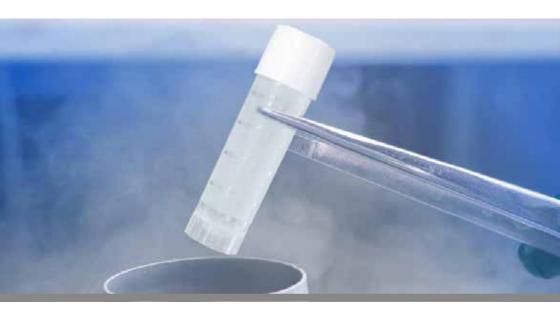
FastGene® Aluminium Rack

The FastGene® Aluminium Rack is a high quality rack holding 1x 96 well PCR plate (semi or non skirted), 6x reaction tubes and 8x PCR tubes. The premium quality aluminium block keeps plates and tubes cool and secure on ice. The high thermal conductivity of aluminium allows reliable, fast and uniform cooling of plates and tubes, which is especially important for sensitive samples, such as PCR enzymes. Keep your samples safe and secure on ice and improve your results - no more tipping over tubes in the ice box and getting ice contaminations.

FastGene® Capeasy

The CapEasy was created to keep your daily labwork simple. Sealing or removing the caps on 8-well and 12well PCR strip tubes can often lead to loss of sample, cross contamination, and sore fingers. This can be avoided by using the CapEasy Tool. The uniformly distributed pressure ensures perfect sealing of all wells regardless if domed or flat lids are used. When access to the contents of the strip tubes is needed, removing the lids is done in a single smooth motion without the chance of knocking the sample out of the tube.

| - | | |
|-----------------------|--------------------------|----------|
| Cat. No. | Product | Content |
| FastGene® Accessories | | |
| FG-AR01 | FastGene® Aluminium Rack | 1 rack |
| FG-CDC02 | FastGene® CapEasyl | 1 device |





FastGene® Screw Cap Tubes

The FastGene® Screw Cap Tubes come in 5 different cap colours to enable easy sample differentiation and sorting. Dark tubes for protecting the sample from light are also available The tubes were designed to tolerate very high temperature fluctuations from -80 °C to 121 °C. They come in two sizes to accomodate two different sample volumes. The large tubes are able to store 2 ml, while the small tubes have a volume of 0.5 ml. Both versions of the FastGene® Screw Cap Tubes have a convex inlay that enables the introduction of FastGene® 2D barcode inserts for easy tracking of stored tubes.



Packaging

The FastGene® Screw Cap Tubes come in small packaging units (25 tubes per bag) to prevent contaminations.



Tube Racks

The FastGene® Tube Rack can hold 48 tubes and is SBS format compatible.



FASTGENE® STORAGE TUBES AND RACKS Safe storage of your valuable samples

The storage of prokaryotic and eukaryotic cells gives the researcher the possibility to perform experiments over an extended time period and save cells that delivered experimental success. Our FastGene[®] Screw Cap Tubes and FastGene[®] Cryo Tubes allow short-term and long-term storage of your valuable samples. They enable performing long-term experiments, that are safe, secure and easily trackable. Both types of FastGene[®] Storage Tubes can be equipped with 2-D barcode inserts for optimal sample organization.



| Cat. No. | Product | Description | Cap | Content |
|---------------------------|------------------------|---|-----|---------------------------|
| FastGene* Screw Cap Tubes | | | | |
| 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® Cryo Storage Tubes

The FastGene® Cryo Tubes are the optimal solution for a safe and long storage of cryopreserved samples. Three different sizes with 0.5 ml, 1 ml and 2 ml volume, the choice of an external or internal lid and the possibility of introducing a FastGene® 2-D barcode offer the right tube for every demand. The Cryo Tubes are selfstanding and extra protected against leakage. They can be stored in suitable FastGene® Cryo Racks, which are SBS format compatible. The SBS format is widely used in an automated environment.



2-D-Inserts

The FastGene® Cryo Tubes have a perfect tube inlay at the bottom that enables the introduction of FastGene® 2-D inserts with barcode.



Cryo Tube Racks

The FastGene® Cryo Tube Rack can hold 40 tubes and is SBSformat compatible.

| 0 | | | | |
|------------------------------|--|---------------------------------|--|--|
| Cat. No. | Product | Content | | |
| FastGene® Cryo Storage Tubes | | | | |
| FG-CRY-05S | 0.5 ml Cryo Tubes with external lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-10S | 1.0 ml Cryo Tubes with external lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-20S | 2.0 ml Cryo Tubes with external lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-In-05S | 0.5 ml Cryo Tubes with internal lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-In-10S | 1.0 ml Cryo Tubes with internal lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-In-20S | 2.0 ml Cryo Tubes with internal lid | 500 tubes (20 bags of 25 tubes) | | |
| FG-CRY-05RC | Cryo Tube Racks in SBS format for 0.5 ml | 10 racks, 40 tubes per rack | | |
| FG-CRY-10RC | Cryo Tube Racks in SBS format for 1.0 ml | 10 racks, 40 tubes per rack | | |
| FG-CRY-20RC | Cryo Tube Racks in SBS format for 2.0 ml | 10 racks, 40 tubes per rack | | |
| FG-CRY-2D | 2-D Inserts with barcode | 500 pieces | | |



FG-CRY-05S

- 0.5 ml tube
- External lid



FG-CRY-10S

- 1.0 ml tube
- External lid



FG-CRY-20S

- 2.0 ml tube
- External lid



FG-CRY-In-05S

- 0.5 ml tube
- volume
- Internal lid



FG-CRY-05RC

- for 0.5 ml tubes
- SBS compatible



FG-CRY-In-10S

- 1.0 ml tube
- volume
- Internal lid



FG-CRY-10RC

- for 1.0 ml tubes
- SBS compatible



FG-CRY-In-20S

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FG-CRY-20RC

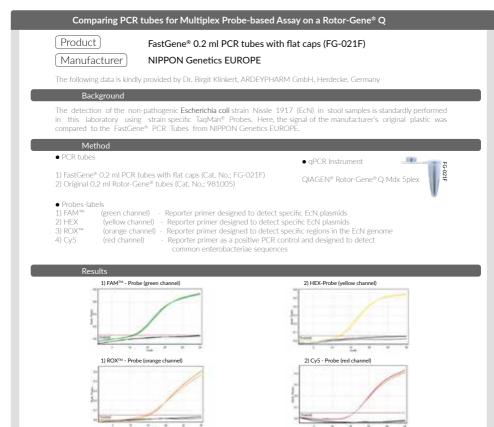
- for 2.0 ml tubes
- SBS compatib

FG-CRY-2D

• 2-D barcode insert









APPLICATION NOTES See how our laboratory plastic performs

High quality plastic is the basis for successful scientific applications and for achieving reliable scientific results. Have a look at a few application notes and performance tests of our laboratory plastic. But the best way to convince yourself of the quality is to try it out. If you would like to test some of our plastic, we would be happy to send you a free sample.

Would you like to test our Lab Plastic?

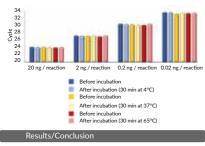
Just give us a call or write us an email if you would like to test our Lab Plastic and receive a free sample!

+49 2421 554960 🔀 info@nippongenetics.de

DNA adsorption test FastGene® 96-well PCR plate (FG-170225)

FastGene® 96-well PCR plate (FG-170225) were tested for their DNA adsorption at different temperatures.

Comparison of the DNA concentration after the incubation of different temperatures (4°C, 37°C, 65°C) compared to control DNA amount before incubation. DNA concentration was determined using qPCR quantification.



The incubation tests under all conditions showed no significant decrease of DNA concentration after incubation in comparison with the control DNA amount. This means that the FastGene® plastic shows no binding of DNA.

DNA adsorption test Screw Cap Tubes

FastGene® Screw Cap Tubes (0.5 ml) were tested for their DNA adsorption during cryopreservation.

Method

Measurement of DNA concentration in FastGene® Screw Cap Tubes before and after cryopreservation.

1: Human genomic DNA was 20-fold diluted in order to create a 250 μl solution with a concentration of 5.0 ng/μl.

2: Each time 50 μ l of this DNA were dispensed to 0.5 ml Screw Cap Tubes. As result, 5 mother tubes were created.

3: For the measurement of DNA concentration in the mother tubes after dispensing, a Qubit® was used.

4: 10 µl from each mother tube were dispensed to three

5: After dispensing the daughter tubes were stored for 24 h at 4°C.

6: The concentration of each daughter tube (5 x 3 daughter tubes = 15 tubes) was measured with Oubit®.

7: The mother tubes' DNA concentration was determined as

| DNA conc. mother tube [ng/µl] | DNA conc. daughter tube [ng/µl] | DNA conc. changing [%] |
|----------------------------------|------------------------------------|------------------------|
| | 5.18 | |
| 5.08 | 5.22 | 101.84 |
| | 5.12 | |
| | | |

Results/Conclusion

The DNA concentration in the FastGene® 0.5 ml Screw Cap Tubes shows little or no change, so that the tubes could be used



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