



FastGene[®] Direct PCR Kit

For direct PCR without prior DNA purification

Cat.No.: LS07 (10 lysate preparations/20 PCR)

Cat.No.: LS08 (50 lysate preparations/100 PCR)

Cat.No.: LS09 (50 lysate preparations/200 PCR)

Cat.No.: LS10 (10 lysate preparations/100 PCR)

STORAGE

Store at -20°C for long-term use. Please refer to section *Storage Conditions* for full details.

FastGene[®] Direct PCR Kit is intended for research use only.

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COMPONENTS

FastGene® Direct PCR Kit	LS07	LS08	LS09	LS10
DNAreleasy Advance Reagent	0.3 ml	1.5 ml	1.5 ml	0.3 ml
KAPA2G Robust HotStart Ready Mix	0.25 ml	1.25 ml	2x 1.25 ml	1.25 ml
Manual	1	1	1	1

STORAGE CONDITIONS

Upon receipt, store the entire kit at -20°C in a constant-temperature freezer. When stored under these conditions and handled correctly, all kit components will retain full activity for at least one year. Always ensure that the components are fully thawed before use. The kit components may be stored at 4°C for regular, short-term use (up to 1 month). Provided. Long-term storage at room temperature or 4°C is not recommended.

SPECIFICATIONS

FastGene® Direct PCR Kit consists of DNAreleasy Advance and Kapa2G Robust HotStart Ready Mix.

DNAreleasy Advance is a complex solution which releases DNA from cells and tissue. After lysis, part of the DNAreleasy Advance lysate can be used directly in a PCR. The DNAreleasy Advance lysate can make up to 10% of most PCR mixes. The lysate can be stored at -20°C for future use.

Kapa2G Robust HotStart Ready Mix is designed for robust, routine PCR of a wide range of targets and fragment sizes.

PROTOCOL - FastGene® Direct PCR Kit

Handling

- Mix cells or homogenized tissue with 30 µl of DNareleasy Advance in a PCR tube. It is important that the lysis solution covers the cells completely.
- For Thermal Cycler without heated lid only: Overlay with mineral oil if necessary.
- Place PCR tube in a Thermal Cycler and start lysis profile:
 - Step 1: 65 °C for 5 minutes
 - Step 2: 96 °C for 5 minutes
 - Step 3: 20 °C for 5 minutes
- Remark: For difficult to lyse samples please start the following lysis profile:
 - Step 1: 65 °C for 15 minutes
 - Step 2: 96 °C for 2 minutes
 - Step 3: 65 °C for 4 minutes
 - Step 4: 96 °C for 1 minute
 - Step 5: 65 °C for 1 minute
 - Step 6: 96 °C for 30 seconds
 - Step 7: 20 °C hold

- Spin down the remaining tissue if necessary. The DNareleasy Advance lysate can be used directly in a PCR with the Kapa2G Robust HotStart ReadyMix.

Please follow the standardized reaction setup recommended for KAPA2G Robust HotStart Ready mix as described on page 2 of the included Technical Data Sheet.

DNareleasy Advance lysate should make up to 10% of subsequent PCR mix. We recommend to test different volumes of lysate in the first experiment in order to find the best conditions. Residual lysate can be stored at -20 °C for future use.

Note: An accurate estimation of DNA yield after lysis can not be done using a spectrophotometer.

Rough guide to DNA content of various genomes

Type	Size of DNA (haploid)	Weight of DNA (daltons)	1 ng of DNA is contained in
Mammals	~ 3.0 x 10 ⁹	~ 1.9 x 10 ¹²	100 cells
Drosophila	~ 1.2 x 10 ⁸	~ 7.7 x 10 ¹⁰	2,500 cells
Yeast	~ 1.6 x 10 ⁷	~ 1.0 x 10 ¹⁰	19,000 yeast
E.coli	~ 4.0 x 10 ⁶	~ 2.5 x 10 ⁹	76,000 bacteria
Bacteriophage T2	~ 2.0 x 10 ⁵	~ 1.3 x 10 ⁸	1,500,000 phage
Bacteriophage λ	~ 48,514	~ 3.1 x 10 ⁷	6,100,000 phage
pBR322	~ 4,363	~ 2.8 x 10 ⁶	67,800,000 plasmids

ORDERING INFORMATION

Product	Cat.No.
FastGene [®] Direct PCR Kit (10 lysates/20 PCRs)	LS07
FastGene [®] Direct PCR Kit (50 lysates/100 PCRs)	LS08
FastGene [®] Direct PCR Kit (50 lysates/200 PCRs)	LS09
FastGene [®] Direct PCR Kit (10 lysates/100 PCRs)	LS10
FastGene [®] Direct PCR High Speed Kit (10 lysates/20 PCRs)	LS11
FastGene [®] Direct PCR High Speed Kit (50 lysates/100 PCRs)	LS12
FastGene [®] Direct PCR High Speed Kit (50 lysates/200 PCRs)	LS13
FastGene [®] Direct PCR High Speed Kit (10 lysates/100 PCRs)	LS14
FastGene [®] DNA Releasy Advance (300 µl/10 rxns)	LS05
FastGene [®] DNA Releasy Advance (1,5 ml/50 rxns)	LS06

CONTACT INFORMATION

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