



## **DNAreleasy Advance**

For preparation of PCR ready templates in 15 minutes

Cat.No.: LS05 (0.3 ml; 10 preparations)

Cat.No.: LS06 (1.5 ml; 50 preparations)

### **STORAGE**

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

DNAreleasy Advance is intended for research use only.

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## COMPONENTS

<b>DNAreleasy Advance</b>	<b>LS05</b>	<b>LS06</b>
DNAreleasy Advance Reagent	0.3 ml	1.5 ml
Manual	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

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.

FastGene® DNAreleasy Advance does not purify DNA from cells or tissue. An accurate estimation of DNA yield after lysis is therefore difficult and can not be done using a spectrophotometer.

## PROTOCOL - FastGene® DNAreleasy Advance

### 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 (e.g. mouse tails or other animal tissue) please start the following lysis profile:
  - Step 1: 65°C for 30 minutes
  - Step 2: 96°C for 5 minutes
  - Step 3: 20°C for 5 minutes

- Spin down the remaining tissue if necessary. The DNAreleasy Advance lysate can be used directly in a PCR. 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.

If PCR results are not satisfying we recommend to use FastGene® Direct PCR Purification Kit. Beside DNAreleasy Advance the FastGene® Direct PCR Kit contains a special DNA Polymerase providing best results with DNAreleasy Advance lysates.

### 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 <sup>9</sup>	~ 1.9 x 10 <sup>12</sup>	100 cells
Drosophila	~ 1.2 x 10 <sup>8</sup>	~ 7.7 x 10 <sup>10</sup>	2,500 cells
Yeast	~ 1.6 x 10 <sup>7</sup>	~ 1.0 x 10 <sup>10</sup>	19,000 yeast
E.coli	~ 4.0 x 10 <sup>6</sup>	~ 2.5 x 10 <sup>9</sup>	76,000 bacteria
Bacteriophage T2	~ 2.0 x 10 <sup>5</sup>	~ 1.3 x 10 <sup>8</sup>	1,500,000 phage
Bacteriophage λ	~ 48,514	~ 3.1 x 10 <sup>7</sup>	6,100,000 phage
pBR322	~ 4,363	~ 2.8 x 10 <sup>6</sup>	67,800,000 plasmids

## ORDERING INFORMATION

<b>Product</b>	<b>Cat.No.</b>
FastGene® DNA Release Advance (300 µl/10 rxns)	LS05
FastGene® DNA Release Advance (1.5 ml/50 rxns)	LS06

## CONTACT INFORMATION

### EUROPE

Nippon Genetics Europe GmbH  
Mariaweilerstraße 28-30  
D-52349 Düren  
Phone: +49(0)2421-554960  
Email: [info@nippongenetics.eu](mailto:info@nippongenetics.eu)  
[info@nippongenetis.de](mailto:info@nippongenetis.de)

For more detailed product information, contact details, questions, or trouble shooting please visit our English website [www.nippongenetics.eu](http://www.nippongenetics.eu) or our German website [www.nippongenetics.de](http://www.nippongenetics.de)

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