NEW PARADIGM OF BIOTECHNOLOGY

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The things possessed
by GENET BIOare the start of a new change.

GENET BIO's products will be a good idea
for supporting change in the future.

GLOBAL GENE NETWORK
GENETBIO

Reagents for your Molecular Biology Experiments

2021 ~ 2022

Resource Guide

Quality Base
NEW PARADIGM of BIOTECHNOLOGY
GENETBIO

GIC IAS ACCREDITED

Kalitest

ISO 13485:2016

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Quality Base
NEW PARADIGM of BIOTECHNOLOGY
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GENET BIO started with the aim of achieving the 'New Paradigm of Biotechnology'

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Selection Guide of DNA Amplification Enzymes

Applications	Prime Taq DNA Polymerase & Premix	ExPrime Taq DNA Polymerase & Premix	HS Prime Taq DNA Polymerase & Premix	Multi HS Prime Taq Premix	Multi HS Prime Taq Premix with UDG	SuPrime HF DNA Polymerase & Premix
Standard PCR (≤5kb)	●	●	●			
Long range PCR (≥5kb)		●				
High - fidelity PCR (for Cloning)						●
A - tailing (for T - vector)	●	●	●	●		
Hot - start PCR			●	●		
Multiplex PCR			●	●		
Real - time PCR			●			
Prevention of Contamination					●	
Note	Wild type Taq DNA Polymerase	Blending type DNA Polymerase	Hot-start Taq DNA Polymerase	Hot - start Taq DNA Polymerase	Hot - start Taq DNA Polymerase with UDG	DNA Polymerase for cloning

Specification of Reaction Buffer for DNA Amplification

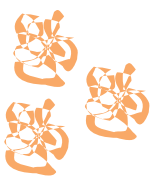
Unique Compositions of Reaction Buffer

Relax the secondary structure of template

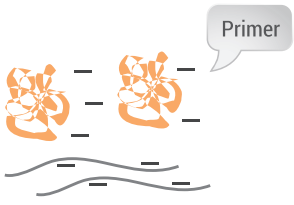
→ Improve the **primer annealing**

→ Improve the **PCR yield**

In case of using the general reation buffer...

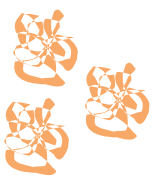


Denaturation & Annealing

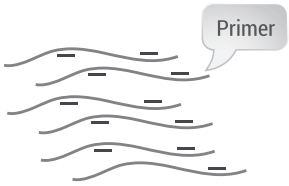


PCR

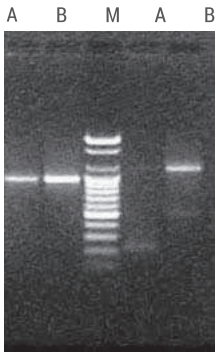
In case of using **GENETBIO** reation buffer...



Denaturation & Annealing



PCR



M: DNA Ladder
Lan A: Company X PCR enzyme
Lan B: **GENETBIO** PCR enzyme

DNA Amplification Enzymes

Prime Taq DNA Polymerase

Description

Prime Taq DNA Polymerase is a high quality recombinant enzyme and catalyze 5'→3' synthesis of DNA. The enzyme has no detectable 3'→5' proofreading exonuclease activity. It is provided with 10X reaction buffer that contains PCR enhancers. This reaction buffer will enable of improve sub-optimal PCR caused by templates that have a high degree of secondary structure or that are GC-rich.

Buffer and Reagents

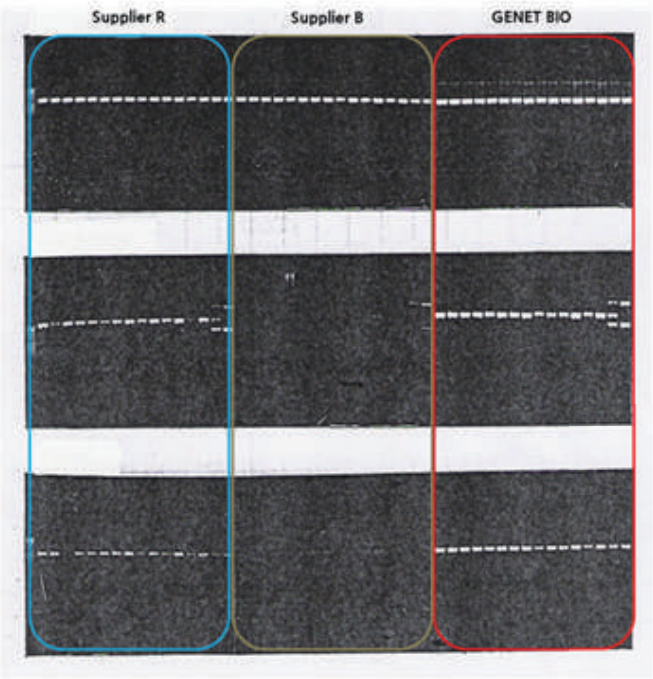
- Storage Buffer : 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.5mM EDTA, 0.1 mM dTT, 0.5% Tween 20, 50% Glycerol.
- 10X Reaction Buffer : Contains Tris-HCl (pH 9.0), 20 mM $MgCl_2$, $(NH_4)_2SO_4$ and PCR enhancers.
- 10 mM dNTPs Mixture : 2.5 mM of each dNTPs

Features

- General PCR enzyme
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Easily obtains under 5 kb of DNA amplified products.
- A DNA fragment which is amplified by Prime Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- Our customer tested the sensitivity and effieciency of Prime Taq DNA Polymerase, Roche and Supplier A.
  Our customer got the more good results when use the Prime Taq DNA Polymerase than others company Taq DNA Polymerase.
- Source of template DNA : plant genomic DNA from seed.



Cat. No.	Pack Size	Supplied with / Remarks
G-1000	Prime Taq DNA Polymerase (5 units/μl) : 50 μl	- 10X reaction buffer (with $MgCl_2$) : 1.0 mL - 10 mM dNTPs Mixture (2.5 mM of each dNTPs) : 0.5 mL

Prime Taq Premix (2X concentrated)

Description

Prime Taq Premix is composed of Prime Taq DNA Polymerase, reaction buffer, dNTPs mixture, enzyme stabilizer and sediment which is needed for electrophoresis, and loading dye, and these components maximize the convenience of users.
Prime Taq DNA Polymerase is a high quality recombinant enzyme and catalyze 5'→3' synthesis of DNA. The enzyme has no detectable 3'→5' proofreading exonuclease activity. It is provided with 10X reaction buffer that contains PCR enhancers. This reaction buffer will enable or improve sub-optimal PCR caused by templates that have a high degree of secondary structure or that are GC-rich.

Composition of 2X Premix

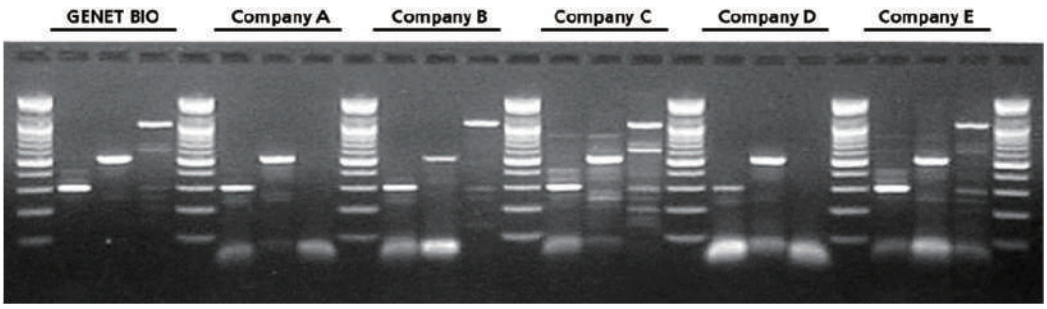
Prime Taq DNA Polymerase 1 unit/10μl, 2X reaction buffer, 4 mM $MgCl_2$, enzyme stabilizer, sediment, loading dye, pH 9.0 and 0.5 mM each of dATP, dCTP, dGTP, dTTP.

Features

- Used general Taq DNA Polymerase.
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Easily obtains under 5 kb of DNA amplified products.
- A DNA fragment which is amplified by Prime Taq Premix has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- PCR reaction test with cDNA by Prime Taq Premix and others Premix.
- Source of template DNA: extracted RNA from human blood and cDNA synthesis.
- Target gene: human hypoxanthine phosphoribosyltransferase 1 (HPRT 1).
- PCR products size : 229 bp, 500 bp, 961 bp.



Cat. No.	Pack Size	Supplied with / Remarks
G-2000	Prime Taq Premix (2X) : 1 mL	

DNA Amplification Enzymes

ExPrime Taq DNA Polymerase

Description

ExPrime Taq DNA Polymerase is easy to obtain PCR products in case of over 5 Kb as well as under 10 Kb of DNA amplified products (Long PCR). Also ExPrime Taq DNA Polymerase gives you the satisfying result under 20Kb by altering of some conditions. (e.g., concentration of template, primer, DNA Polymerase or increase of extension time)

Buffer and Reagents

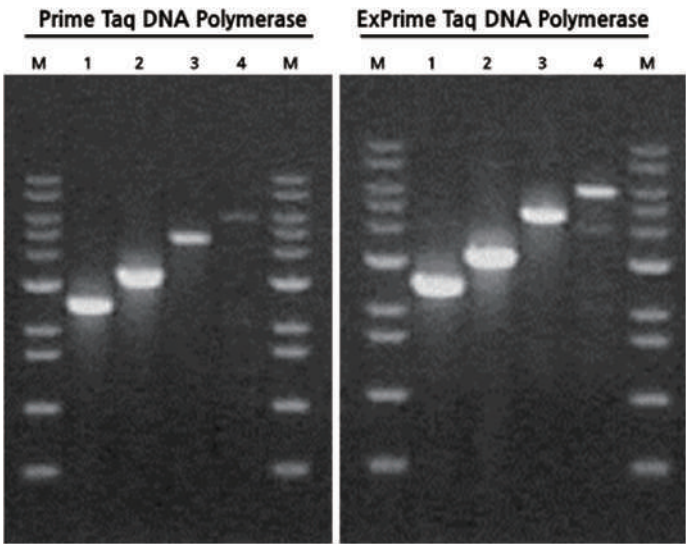
- Storage Buffer : 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.5 mM EDTA, 0.1 mM DTT, 0.5% Tween 20, 50% Glycerol.
- 10X Reaction Buffer : Contains Tris-HCl (pH 9.0), 20 mM $MgCl_2$, $(NH_4)_2S0_4$ and PCR enhancers.
- 10 mM dNTPs Mixture : 2.5 mM of each dNTPs.

Features

- Blending PCR enzyme.
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Easily obtains more than 5 Kb of DNA amplified products.
- A DNA fragment which is amplified by ExPrime Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- Long size PCR test Prime Taq DNA Polymerase and ExPrime Taq DNA Polymerase.
- When use ExPrime Taq DNA Polymerase, can get more good performance.
- PCR products size : 2,450 bp, 3,050 bp, 4,500 bp, 5,750 bp.



Cat. No.	Pack Size	Supplied with / Remarks
G-4000	ExPrime Taq DNA Polymerase (5 units/μl) : 50 μl	- 10X reaction buffer (with $MgCl_2$) : 1.0 mL - 10 mM dNTPs Mixture (2.5 mM of each dNTPs) : 0.5 mL

ExPrime Taq Premix (2X concentrated)

Description

ExPrime Taq Premix is composed of ExPrime Taq DNA Polymerase, reaction buffer, dNTPs mixture, enzyme stabilizer and sediment which is needed for electrophoresis, and loading dye, and these components maximize the convenience of the users.
Also ExPrime Taq Premix is easy to obtain PCR products in case of over 5 Kb as well as under 10 Kb of DNA amplified products (Long PCR).

Composition of 2X Premix

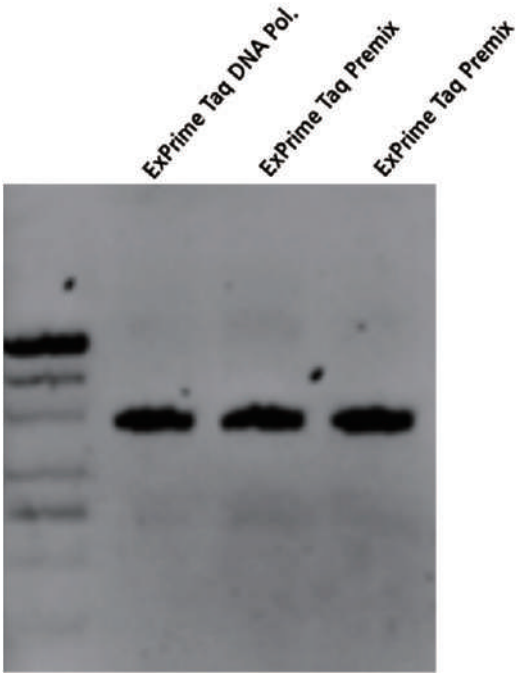
ExPrime Taq DNA Polymerase 1 unit/10μl, 2X reaction buffer, 4 mM $MgCl_2$, enzyme stabilizer, sediment, loading dye, pH 9.0 and 0.5 mM each of dATP, dCTP, dGTP, dTTP.

Features

- Blending PCR enzyme.
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Easily obtains more than 5 Kb of DNA amplified products.
- A DNA fragment which is amplified by ExPrime Taq Premix has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- Our customer tested equivalence of ExPrime Taq DNA Polymerase and ExPrime Taq Premix.
- Source of template DNA: extracted DNA from HeLa cell library.
- PCR products size : 1,500bp.



Cat. No.	Pack Size	Supplied with / Remarks
G-5000	ExPrime Taq Premix (2X) : 1 mL	

DNA Amplification Enzymes

HS Prime Taq DNA Polymerase

Description

HS Prime Taq DNA Polymerase is designed for hot-start PCR, a technique that enhances the specificity, sensitivity and yield of DNA amplification. In addition, the enzyme provides the convenience of reaction set-up at room temperature. The enzyme is inactive at room temperature, avoiding extension of non-specifically annealed primers or primer dimers and providing higher specificity of DNA amplification. The functional activity of the enzyme is resotred during 10 minutes incubation at 95℃. The activated enzyme maintains the same functionality as Taq DNA Polymerase. It catalyzes 5'→3' synthesis of DNA, has no detectable 3'→5' proofreading exonuclease activity.

Buffer and Reagents

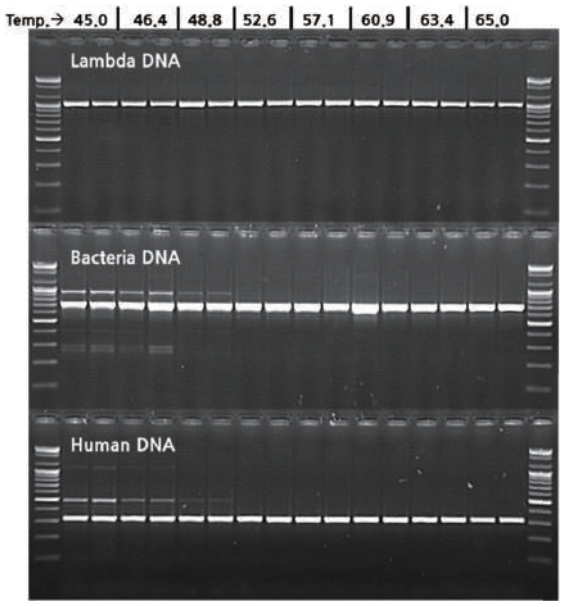
- Storage Buffer : 20 mM Tris (pH 8.0), 0.5 mM EDTA, 0.1 mM DTT, 0.5% Tween 20, 50% Glycerol.
- 10X Reaction Buffer: Contains Tris (pH 9.0), 20 mM $MgCl_2$, $(NH_4)_2SO_4$ and PCR enhancers.
- 10 mM dNTPs mixture: 2.5 mM of each dNTPs.

Features

- 10 mM dNTPs mixture: 2.5 mM of each dNTPs.
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Amplification of low copy or high range size DNA target.
- Useable in Real-time PCR and multiplex PCR.
- A DNA fragment which is amplified by HS Prime Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- HS Prime Taq DNA Polymerase activity test in variable annealing temperature.
- Each primer Tm value is 55 ~ 57℃.
- PCR products size: lambda DNA - 1,000 bp, bacteria DNA - 750 bp, human DNA - 320 bp.



Cat. No.	Pack Size	Supplied with / Remarks
G-7000	HS Prime Taq DNA Polymerase (2.5 units/μl): 100 μl	- 10X reaction buffer (with $MgCl_2$): 1.0 mL - 10 mM dNTPs Mixture (2.5 mM of each dNTPs): 0.5 mL

HS Prime Taq Premix (2X concentrated)

Description

HS Prime Taq Premix contains HS Prime Taq DNA Polymerase, reaction buffer, dNTPs mixture, enzyme stabilizer, loading dye, and optimizes the convenience to use by adding sediment for electrophoresis. HS Prime Taq DNA Polymerase is designed for hot-start PCR, a technique that enhances the specificity, sensitivity and yield of DNA amplification. In addition, the enzyme provides the convenience of reaction set-up at room temperature. The enzyme is inactived at room temperature, avoiding extension of nonspecifically annealed primers or primer dimers and providing higher specificity of DNA amplification. The functional activity of the enzyme is restored during 10 minute incubation at 94℃. The activated enzyme maintains the same functionality as Taq DNA Polymerase. It catalyzes 5'→3' synthesis of DNA, has no detectable 3'→5' proofreading exonuclease activity.

Composition of 2X Premix

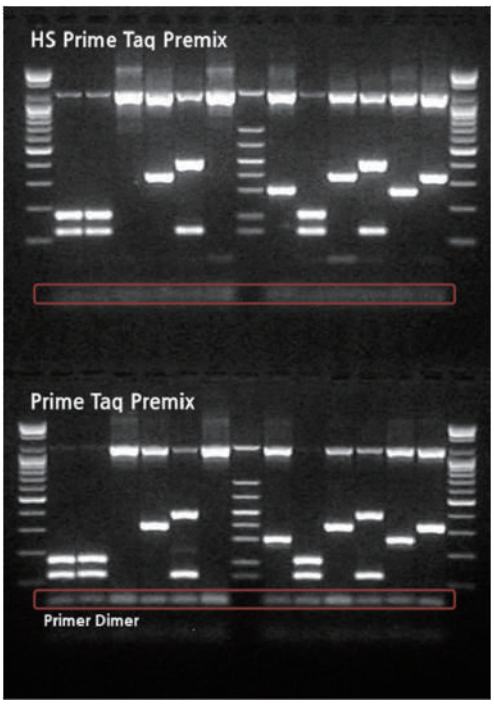
HS Prime Taq DNA Polymerase 1 unit/10 μl, 2X reaction buffer, 4 mM $MgCl_2$, enzyme stabilizer, sediment, loading dye, pH 9.0 and 0.5 mM each of dATP, dCTP, dGTP, dTTP.

Features

- HS Prime Taq Premix uses hot-start Taq DNA Polymerase by anti-Taq monoclonal antibody.
- Guarantees reproducible test result by its characteristic of high purity.
- Amplifies target DNA by optimized buffer system.
- Amplification of low copy or high range size DNA target.
- Useable in multiplex PCR.
- DNA fragment which is amplified by HS Prime Taq Premix has A-overhang, and it enables you to do cloning by using T-vectors.

Performance

- If uses the HS Prime Taq Premix, we can get result more good yield and decreased primer dimer.
- Source of template DNA: extracted total bacterial and human genomic DNA from stool.



Cat. No.	Pack Size	Supplied with / Remarks
G-7100	HS Prime Taq Premix (2X) : 1 mL	

DNA Amplification Enzymes

Multi HS Prime Taq Premix (2X concentrated)

Multi HS Prime Taq Premix with UDG (2X concentrated)

Description

The Multi HS Prime Taq Premix is for multiplex PCR. This product contains a master mix whose composition and elements were specifically developed for multiplex applications. This product contains optimized concentrations of hot-start Taq DNA Polymerase (HS Prime Taq DNA Polymerase, G-7000), dNTPs mixture, $MgCl_2$ and reaction buffer.
Multiplex PCR is a powerful technique that enables amplification of two or more products in parallel in a single reaction tube.
It is widely used in genotyping applications and different areas of DNA testing in research, forensic, and diagnostic laboratories.

Composition of 2X Premix

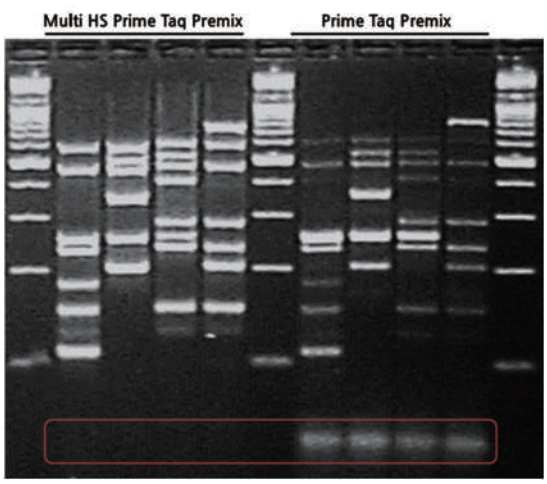
HS Prime Taq DNA Polymerase, 2X reaction buffer, 4 mM $MgCl_2$, enzyme stabilizer, sediment, loading dye, pH 9.0 and 0.5 mM each of dATP, dCTP, dGTP, dTTP.

Features

- Multi HS Prime Taq Premix uses hot-start Taq DNA Polymerase by anti-Taq monoclonal antibody.
- Genotyping applications. (e.g., STR, VNTP analysis)
- Detection of pathogens/diagnostics.
- Qualitative and semi-quantitative gene expression analysis.

Performance

- Qualitative and semi-quantitative gene expression analysis.
- Source of template DNA: extracted total bacterial and human genomic DNA from stool.
- Target gene: toxin genes of pathogenic bacteria.



Cat. No.	Pack Size	Supplied with / Remarks
MH - 7100	Multi HS Prime Taq Premix (2X) : 1 mL	
UMH - 7100	Multi HS Prime Taq Premix with UDG (2X) : 1 mL	

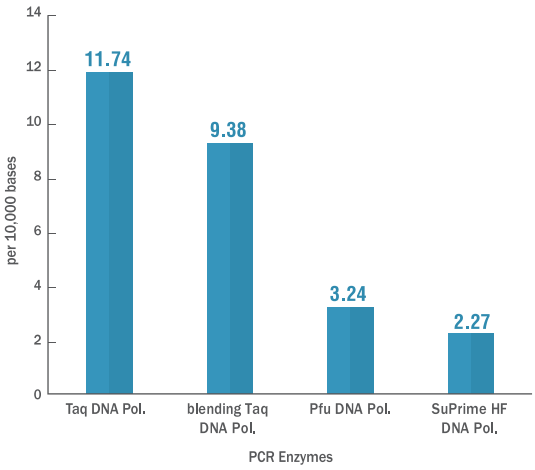
SuPrime HF DNA Polymerase

SuPrime HF Premix (2X concentrated)

Description

SuPrime HF DNA Polymerase is pyrococcus-like proofreading DNA Polymerase and provides the highest fidelity and high speed DNA synthesis.

Error Rate of SuPrime HF DNA Polymerase



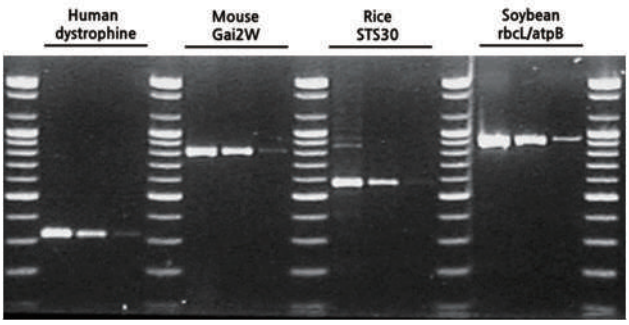
- Genomic DNA were amplified with SuPrime HF DNA Polymerase and other Polymerase.
  1 kb PCR products were cloned into vector.
  Each 100 clones were selected and subjected to sequence analysis to determine the error rate.

Features

- SuPrime HF DNA Polymerase produce blunt end DNA fragments.
- The extension time for long PCR is 20~30 sec/kb.
- The denaturation and extension temp. is 98°C and 68°C
- The concentration of reaction buffer is 5X.
- If the smearing or non-specific products are appeared, decrease the enzyme concentration or the extension time.

Performance

- SuPrime HF DNA Polymerase (1u) activity test with serial 10-times (1, 10^{-1}, 10^{-2}) diluted genomic DNA.
- PCR condition: 98°C. 10 sec, 57°C 20 sec, 68°C 20 sec, total 25 cycles.
- Target gene and PCR products size: human dystrophine 215 bp, mouse Gai2w 805 bp, rice STS30 600 bp, soybean rbcL/atpB 950 bp.



Cat. No.	Pack Size	Supplied with / Remarks
HF-1000	SuPrime HF DNA Polymerase (2.5 units/μl): 100 μl	- 5X reaction buffer (with $MgCl_2$): 1.0 mL x 2 tubes - 10 mM dNTPs Mixture (2.5 mM of each dNTPs): 1.0 mL
HF-2000	SuPrime HF Premix (2X): 1.0 mL	

DNA Amplification Enzymes

10 mM dNTPs Mixture (2.5 mM of each dNTPs)

100 mM dNTPs Mixture (25 mM of each dNTPs)

Description

dNTPs mixture is aqueous solution at pH 7.0 contains dATP, dCTP, dGTP and dTTP.
dNTPs mixture is ready-to-use solutions designed to save time and to provide higher reproducibility in PCR and other applications.

Quality Control

Endonuclease, Exonuclase, DNase, RNase and Protease activity is not detected.
dNTPs Mixture is determined to be >99% pure as judged by HPLC analysis.

dATP

- 2'-deoxyadenosine 5'-triphosphate, sodium salt
- $C_{10}H_{13}N_5O_{12}P_3Na_3$
- Molecular Weight: M.W = 491.2 g/mol (free acid)
- Concentration: 2.5 mM (or 25 mM), pH 7.0
- Purity: >99% by HPLC
- Amax at pH 7.0: 259 nm
- A250/A260: 0.77 ~ 0.83 A280/A260: 0.12 ~ 0.18

dCTP

- 2'-deoxycytidine 5'-triphosphate, sodium salt
- $C_9H_{13}N_3O_{13}P_3Na_3$
- Molecular Weight: M.W = 467.1 g/mol (free acid)
- Concentration: 2.5 mM (or 25 mM), pH 7.0
- Purity: >99% by HPLC
- Amax at pH 7.0: 272 nm
- A250/A260: 0.77 ~ 0.83 A280/A260: 0.93 ~ 0.99

dGTP

- 2'-deoxycytidine 5'-triphosphate, sodium salt
- $C_{10}H_{13}N_5O_{13}P_3Na_3$
- Molecular Weight: M.W = 507.1 g/mol (free acid)
- Concentration: 2.5 mM (or 25 mM), pH 7.0
- Purity: >99% by HPLC
- Amax at pH 7.0: 253 nm
- A250/A260: 1.12 ~ 1.18 A280/A260: 0.64 ~ 0.70

dTTP

- 2'-deoxycytidine 5'-triphosphate, sodium salt
- $C_{10}H_{14}N_2O_{14}P_3Na_3$
- Molecular Weight: M.W = 482.1 g/mol (free acid)
- Concentration: 2.5 mM (or 25 mM), pH 7.0
- Purity: >99% by HPLC
- Amax at pH 7.0: 2267 nm
- A250/A260: 0.62 ~ 0.68 A280/A260: 0.70 ~ 0.76

Cat. No.	Pack Size	Supplied with / Remarks
G - 9000	10 mM dNTPs Mixture (2.5 mM of each dNTPs) : 1.0 mL	
G - 9100	100 mM dNTPs Mixture (25 mM of each dNTPs) : 1.0 mL	


dNTPs Mix
each 2.5 mM
Vol. 1.0 ml
Store at -20°C
Research use only
dNTPs Mix
each 2.5 mM
Vol. 1.0 ml
Store at -20°C
Research use only
dNTPs Mix
each 2.5 mM
Vol. 1.0 ml
Store at -20°C
Research use only
dNTPs Mi
each 2.5 mM
Vol. 1.0 ml
Store at -20°C
Research use on

Real - time PCR Reagents

Real-time PCR Reagents

Selection Guide of DNA Amplification Enzymes

	Prime Q-Mastermix (2X)	Prime Q-Mastermix (2X, with ROX dye)	HS Prime qPCR Premix (2X)	HS Prime qPCR Premix (2X, with ROX dye)	SuPrimeScript qRT-PCR Kit	SuPrimeScript qRT-PCR Kit (with ROX dye)
SYBR Green I Mix	●	●				
SYBR Green I Mix + ROX vial		●				
Use of TaqMan Probe			●	●	●	●
Use of TaqMan Probe + ROX vial				●		●
DNA Amplification	●	●	●	●		
RNA Amplification					●	●
Contents of Product	• 2X Q-Mastermix (HS Prime Taq Pol., reaction buffer, enzyme stabilizer, dNTPs Mixture, SYBR Green I)	• 2X Q-Mastermix (HS Prime Taq Pol., reaction buffer, enzyme stabilizer, dNTPs Mixture, SYBR Green I) • 50X ROX dye	• 2X qPCR Premix (HS Prime Taq Pol., reaction buffer, enzyme stabilizer, dNTPs Mixture)	• 2X qPCR Premix (HS Prime Taq Pol., reaction buffer, enzyme stabilizer, dNTPs Mixture) • 50X ROX dye	• Enzyme Solution (RTase, HS Prime Taq Pol., RNase Inhibitor) • 2X RT-PCR Buffer (reaction buffer, dNTPs Mixture)	• Enzyme Solution (RTase, HS Prime Taq Pol., RNase Inhibitor) • 2X RT-PCR Buffer (reaction buffer, dNTPs Mixture) • 50X ROX dye

Prime Q-Mastermix (2X, SYBR Green I)

• Description

Prime Q-Mastermix (with SYBR Green I) is a very sensitive and easy to use for real-time quantitative analysis of DNA and cDNA targets from various sources. Prime Q-Mastermix (with SYBR Green I) is based on the SYBR Green I and hot-start Taq DNA Polymerase.

• Composition of 2X Premix

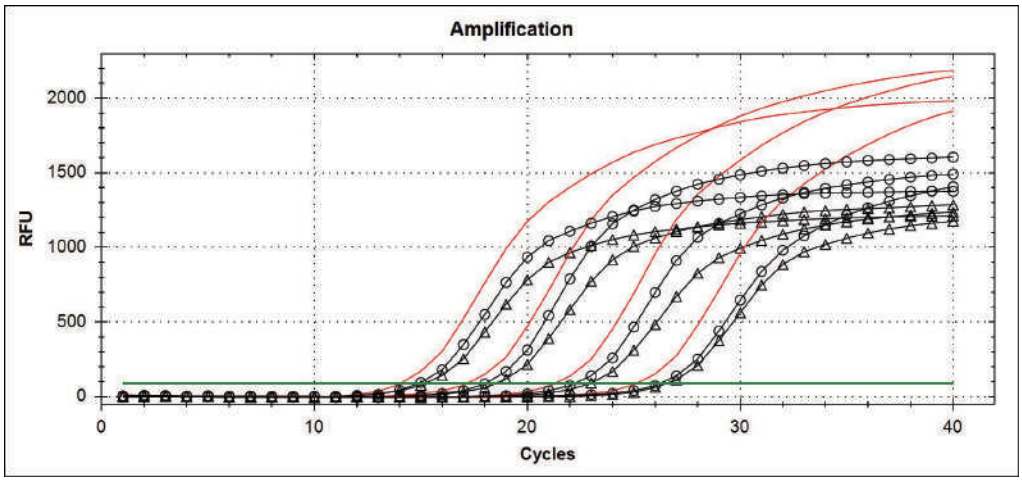
1 unit HS Prime Taq DNA Polymerase, 5 mM $MgCl_2$, 2 mM dNTPs mixture and 2X SYBR Green I.

• Features

- Real-time quantification of DNA and cDNA targets.
- Gene expression profiling.
- Detection of pathogens/diagnostics.
- Microbial & viral pathogen detection.

• Performance

- Real-time PCR test with GENET BIO's Prime Q-Mastermix (Red linear line), Supplier A (Black circle line) and B (Black triangle line).
- We had gotten more good result in RFU and Ct value.
- Template DNA: extracted bacterial genomic DNA.
- Used DNA concentration: 10^5 copy, 10^4 copy, 10^3copy, 10^2copy.
- Used Real-time PCR machine: Bio-Rad CFX96.



Cat. No.	Pack Size	Supplied with / Remarks
Q-9200	Prime Q-Mastermix (2X): 1.0 mL	SYBR Green I is included in 2X Mastermix
Q-9210	Prime Q-Mastermix (2X, ROX dye): 1.0 mL	- SYBR Green I is included in 2X Mastermix - ROX dye is supplied with separated tube - 50X ROX dye: 50 µl

Real - time PCR Reagents

HS Prime qPCR Premix (2X, for TaqMan™ Probe)

HS Prime qPCR Premix with UDG (2X, for TaqMan™ Probe)

• Description

HS Prime qPCR Premix (2X, for Probe Real-time PCR) is a 2X premix reagent for real-time PCR by using TaqMan® probe. This product is contains HS Prime Taq DNA Polymerase, which is an enzyme for hot-start PCR.
Also HS Prime qPCR Premix (2X, for Probe Real-time PCR) provide a PCR Premix that may be used with any appropriately designed primer and probe to detect any or cDNA sequence.

• Composition of 2X Premix

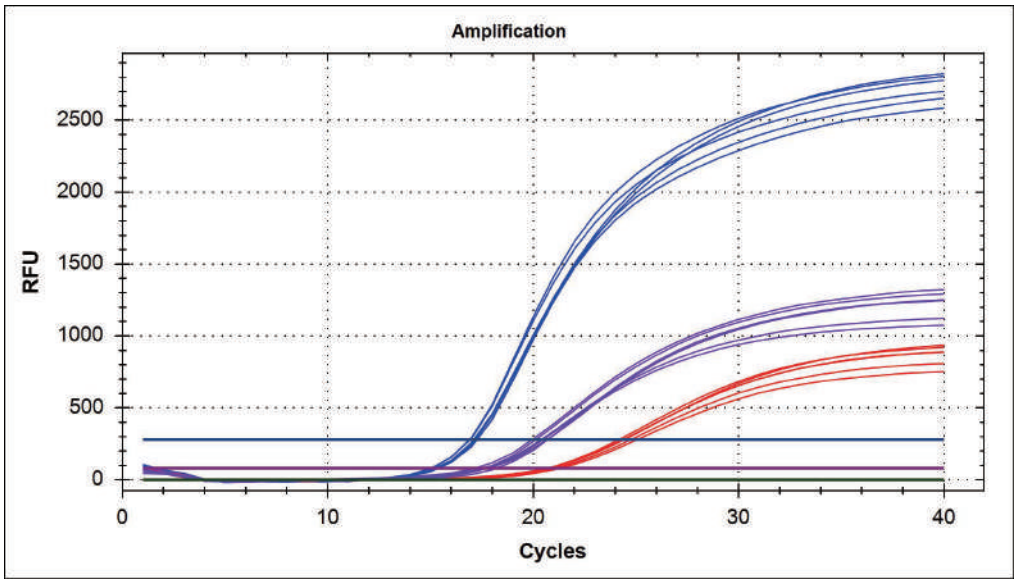
HS Prime Taq DNA Polymerase, $MgCl_2$, dNTPs mixture and qPCR enhancers.

• Features

- Real-time quantification of DNA and cDNA and all nucleotide sequence targets.
- Gene expression profiling.
- Detection of pathogens/diagnostics.
- Microbial & viral pathogen detection.

• Performance

- Real-time PCR test with multiplex primer and fluorescent dye by GENET BIO's HS Prime qPCR Premix. .
- Template DNA: extracted viral ssDNA. (each 5 samples)
- Used fluorescent dye: FAM (blue line), Cy5 (purple line), HEX (red line).
- Used Real-time PCR machine: Bio-Rad CFX96.



Cat. No.	Pack Size	Supplied with / Remarks
Q - 4000	HS Prime qPCR Premix (2X) : 1 mL	
Q - 4100	HS Prime qPCR Premix (2X, ROX dye) : 1.0 mL	- ROX dye is supplied with separated tube - 50X ROX dye: 50 µl
UQ - 4000	HS Prime qPCR Premix with UDG (2X) : 1 mL	
UQ - 4100	HS Prime qPCR Premix with UDG (2X, ROX dye) : 1.0 mL	- ROX dye is supplied with separated tube - 50X ROX dye: 50 µl

SuPrimeScript qRT-PCR Kit（for TaqMan™ Probe）

• Description

SuPrimeScript qRT-PCR Kit and SuPrimeScript qRT-PCR Premix（for Probe Real-time PCR）provide a complete system for fast, high-yield and reliable single-tube one-step qRT-PCR. Especially, high performances of these products are from use of hot-start Taq DNA Polymerase by monoclonal Taq-antibody and high quality SuPrimeScript Reverse Transcriptase.

• Composition of 2X Premix

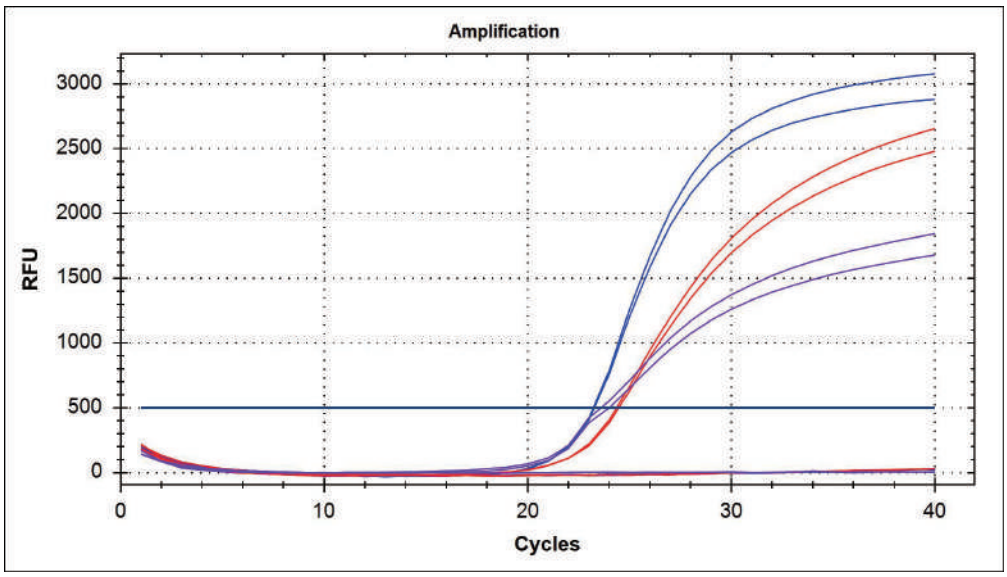
HS Prime Taq DNA Polymerase, SuPrimeScript Reverse Transcriptase, RNase Inhibitor, $MgCl_2$, dNTPs mixture and qRT-PCR enhancers.

• Features

- Real-time quantification of RNA targets.
- Gene expression profiling.
- Detection of pathogens/diagnostics.
- RNA and DNA viral pathogen detection.

• Performance

- one-step Real-time RT-PCR test with 3-plex primer and fluorescent dye by GENET BIO's SuPrimeScript qRT-PCR Kit.
- Template DNA: extracted viral RNA（each 2 samples）.
- Used fluorescent dye: FAM（blue line）, Cy5（purple line）, HEX（red line）.
- Used Real-time PCR machine: Bio-Rad CFX96.



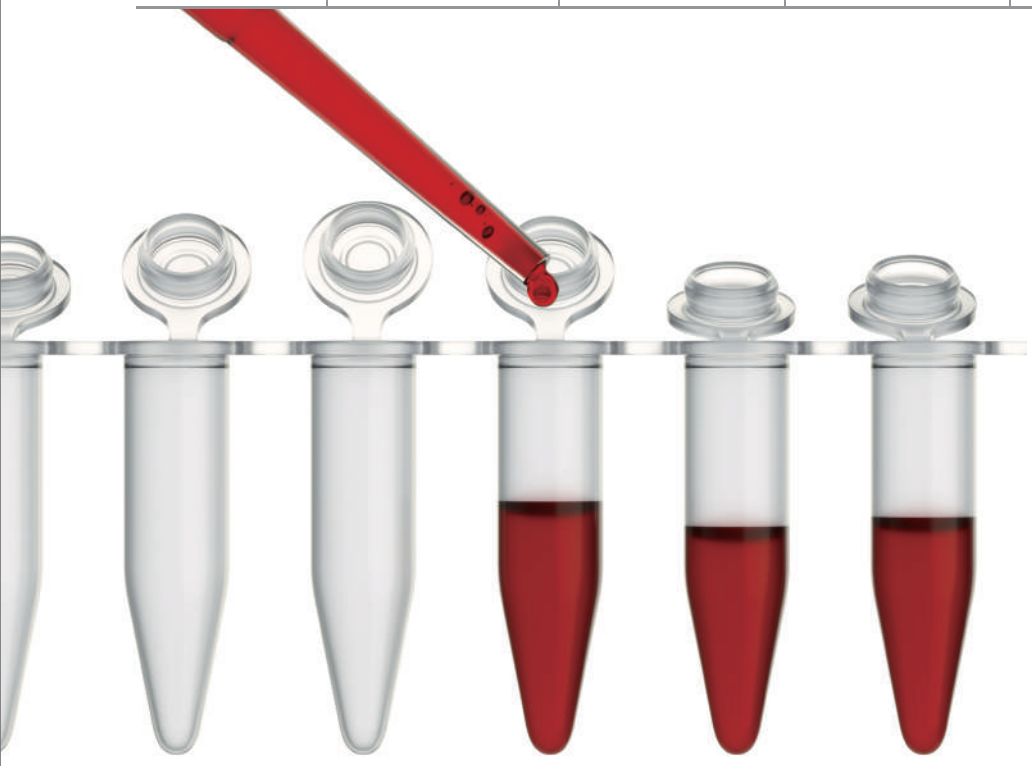
Cat. No.	Pack Size	Supplied with / Remarks
Q - 5000	SuPrimeScript qRT-PCR Kit（2X）	- 10X Enzyme Solution: 200 μl - 2X qRT-PCR buffer: 1.2 mL
Q - 5100	SuPrimeScript qRT-PCR Kit（2X, ROX dye）	- 10X Enzyme Solution: 200 μl - 2X qRT-PCR buffer: 1.2 mL - ROX dye is supplied with separated tube - 50X ROX dye: 50 μl

RNA Amplification Enzymes

RNA Amplification Enzymes

Selection Guide of DNA Amplification Enzymes

	SuPrimeScript RTase	SuPrimeScript RT Premix	SuPrimeScript RT Premix (with oligo(dT))	SuPrimeScript RT - PCR Kit	SuPrimeScript RT - PCR Premix
Standard cDNA synthesis	●	●	●		
One - step RT- PCR				●	●
RNase Inhibitor		●	●	●	●
Simplicity	LOW	Middle	Middle	High	High
Usable Primer	oligo(dT) Random Primer Specific Primer	oligo(dT) Random Primer Specific Primer	Contained with oligo(dT)	Specific Primer	Specific Primer
Contents of Product	• SuPrimeScript RTase • 2X Reaction Buffer • 10 mM dNTPs Mixture	• 2X RT Premix(RTase, reaction buffer, RNase Inhibitor, dNTPs Mixture)	• 2X RT Premix(RTase, reaction buffer, RNase Inhibitor, dNTPs Mixture, oligo(dT_{20}))	• Enzyme Solution(HS Prime Taq Pol., RNase Inhibitor) • 2X RT-PCR Buffer(reaction buffer, dNTPs Mixture)	• 2X RT-PCR Premix(RTase, HS Prime Taq Pol., reaction buffer, RNase Inhibitor, dNTPs Mixture, loading dye)



SuPrimeScript Reverse Transcriptase

SuPrimeScript RT Premix (2X concentrated)

SuPrimeScript RT Premix (2X concentrated, with oligo dT_{20})

Description

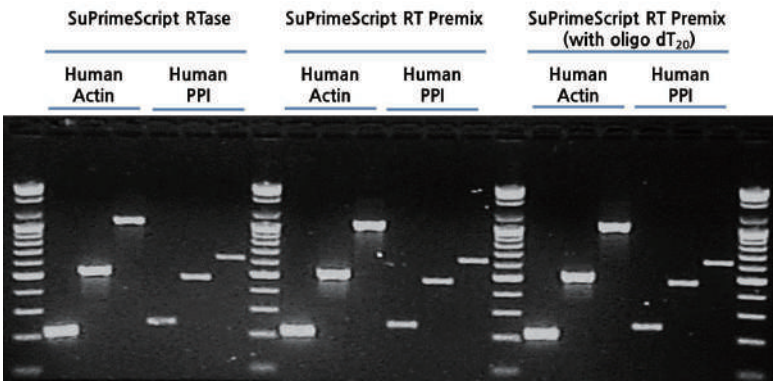
SuPrimeScript Reverse Transcriptase is a mutant of MMLV RTase with reduced RNase H activity and increased thermal stability.

Features

- The reaction temperature for cDNA synthesis is 50˚C
- The reaction time for cDNA synthesis is 60 min.
- In SuPrimeScriptRTase, the concentration of Reaction Buffer is 2X.
- SuPrimeScript RTase is RNase H.
- SuPrimeScript RT Premix (2X, with oligo dT_{20}) is including oligo dT_{20} in Premix.

Performance

- SuPrimeScript RT Premix (2X, with oligo dT_{20}) is including oligo dT_{20} in Premix.
- PCR was performed with cDNA product 1 µl by HS Prime Taq premix (Cat. No. G-7100).
- RNA sample: Lung total RNA 50 ng.
- Used DNA concentration: 10^5 copy, 10^4 copy, 10^3copy and 10^2copy.
- Human Actin PCR product: 209 bp, 515 bp, 1017 bp.
  Human Protein Phosphatase(PPI) PCR product: 234 bp, 462 bp, 613 bp.



Cat. No.	Pack Size	Supplied with / Remarks
SR - 1000	SuPrimeScript Reverse Transcriptase	- SuPrimeScript RTase (1 u/µl) : 50 units - 2X Reaction Buffer: 0.6 mL - 10 mM dNTPs mixture (each 2.5 mM) : 0.125 mL
SR - 2000	SuPrimeScript RT Premix(2X) : 1.0 mL	- RNase Inhibitor is included in Premix
SR - 4000	SuPrimeScript RT Premix(2X, with oligo dT_{20}) : 1.0 mL	- RNase Inhibitor and oligo dT_{20} are included in Premix

RNA Amplification Enzymes

SuPrimeScript RT-PCR Kit

SuPrimeScript RT-PCR Premix（2X concentrated）

Description

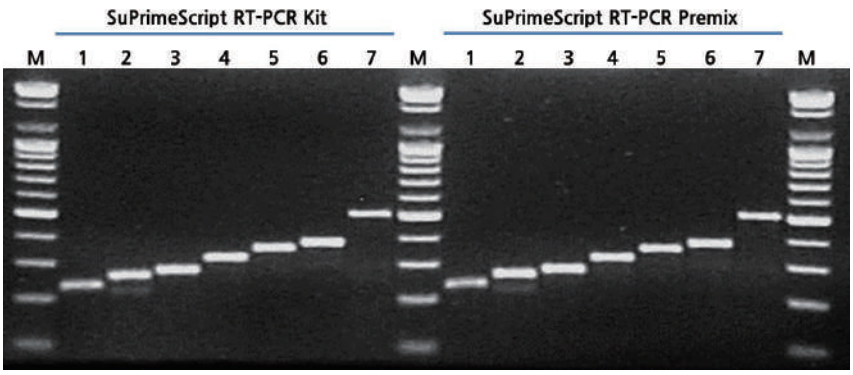
SuPrimeScript RT-PCR Kit and RT-PCR Premix provide a complete system for fast, high-yield and reliable single tube one-step RT-PCR

Features

- The reaction temperature for cDNA synthesis is 50°C.
- The reaction time for cDNA synthesis is 20 min.
- In SuPrimeScript RT-PCR Kit, the concentration of Reaction Buffer is 2X.
- SuPrimeScript RTase is RNase H-.
- SuPrimeScript RT-PCR Kit and RT-PCR Premix contain HS Prime Taq DNA Polymerase（hot-start Taq DNA Polymerase）.

Performance

- One-step RT-PCR reaction was performed with SuPrimeScript RT-PCR Kit and SuPrimeScript RT-PCR Premix.
- RNA sample: Lung total RNA 50 ng.
- lane 1: human AIB 1（256 bp）, lane 2: human CBP（272 bp）, lane 3: human ER-a（299 bp）, lane 4: human TIF2（314 bp）. Lane 5: human N-CoR（349 bp）, lane 6: human SRC-1（372 bp）, lane 7: human HPRT（500 bp）.



Cat. No.	Pack Size	Supplied with / Remarks
SR - 6000	SuPrimeScript RT-PCR Kit	- 10X Enzyme Solution: 250 µl - 2X Reaction Buffer: 1.5 mL
SR - 7000	SuPrimeScript RT-PCR Premix（2X）: 1.0 mL	- All components for cDNA synthesis and PCR are included in Premix


GeNet Bio
Global Gene Network
PrimePrep
Genomic DNA Extraction Kit
from Plant
PrimePrep
Gel Purification Kit
PrimePrep
PCR Purification Kit
PrimePrep
Genomic DNA Extraction Kit
from Tissue
PrimePrep™
Viral RNA/DNA Extraction Kit
PrimePrep
Plasmid DNA Extraction Kit
PrimePrep™
Blood RNA Extraction Kit
PrimePrep
Genomic DNA Extraction Kit
from Blood
Quality Base
www.genetbio.com

DNA Purification Kits

DNA Purification Kits

Simple Procedure of DNA Purification Kits

PrimePrep Plasmid DNA Extraction Kit (K-1000)	PrimePrep Genomic DNA Extraction Kit from Blood (K-2000)	PrimePrep Genomic DNA Extraction Kit from Tissue (K-3000)	PrimePrep Genomic DNA Extraction Kit from Plant (K-4000)	PrimePrep PCR Purification Kit (K-7000)	PrimePrep Gel Purification Kit (K-8000)
Cell Resuspension & Lysis & Neutralization	Lysis & Incubation at 56℃ for 10 min & add Ethanol	Lysis & Incubation at 56℃ & add GB buffer & add Ethanol	Grind & Lysis & Precipitation	PCR products + Binding buffer	Gel + Binding buffer & Incubation at 50℃ for 5~10 min & add Isopropanol
Transfer the supernatant to the spin column	Transfer the supernatant to the spin column	Transfer the supernatant to the spin column	Transfer the supernatant to the new tube & add GB buffer	Transfer the supernatant to the spin column	Transfer the supernatant to the spin column
Wash	Wash X 2	Wash X 2	Transfer the mixture to the spin column	Wash	Wash X 2
Elution	Elution	Elution	Wash X 2	Elution	Elution
			Elution		
plasmid	whole blood plasma serum buffy cost body fluids	mammalian cell tissue bacterial cell (Gram)	seed root leave stem etc	PCR Product	DNA fragment in agarose gel

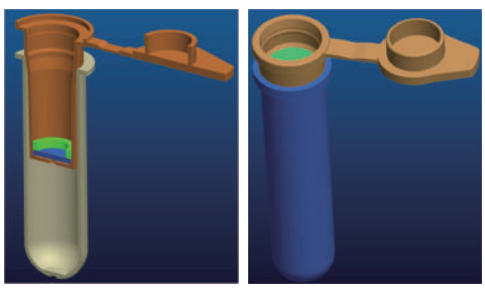
Keynote of DNA Purification Kits

Use of unique DNA binding filter

- DNA binding capacity increases compared with DNA binding filter used by other existing companies.
- Hardly exist any hangover of ethanol because it is much thinner during the ethanol washing (the minimum of obstructive factors to sequencing or limited enzymatic reaction).
- Maximize the volume of refined plasmid and genomic DNA.

Adoption of attached cap spin column

- minimize cross-contamination which can occur in case of isolation a great case of samples.

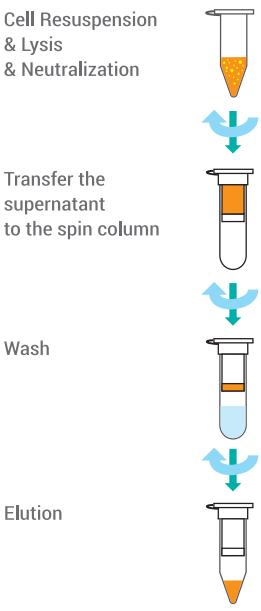


PrimePrep Plasmid DNA Extraction Kit

• Description

PrimePrep Plasmid DNA Extraction Kit offer simple, rapid and cost-effective method for isolating plasmid DNA from bacterial cells. This kit is designed for the preparation of up 20 μg of high-purity plasmid DNA from 1~5 ml overnight E. coli culture in LB medium. Plasmid DNA purified with mini kits is immediately ready for use. Phenol extraction and ethanol precipitation are not required, and high-quality plasmid DNA is eluted in a small volume of Elution buffer.

• Simple Procedure



Cat. No.	Pack Size	Supplied with / Remarks	
K - 1000	PrimePrep Plasmid DNA Extraction Kit: 50 prep	1. Spin Column	50 ea
		2. Buffer PR	20 mL
		3. Buffer PL	20 mL
		4. Buffer PN	20 mL
		5. Buffer PO	20 mL
		6. Buffer PW	10 mL
		7. Buffer PE	10 mL
		8. RNase A Solution (10mg/ml)	200 μl

DNA Purification Kits

PrimePrep Genomic DNA Extraction Kit from Blood

PrimePrep Genomic DNA Extraction Kit from Tissue

• Description

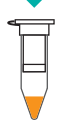
PrimePrep Genomic DNA Extraction Kit is designed for the rapid preparation of genomic DNA from Blood or Tissue.

▸ PrimePrep Genomic DNA Extraction Kit (from Blood, K-2000) kit is suitable to use with whole blood treated with either citrate or EDTA and it takes about 20 minutes to complete all processing of samples.

▸ PrimePrep Genomic DNA Extraction Kit (from Tissue, K-3000) is designed for isolating genomic DNA from mammalian cells, tissues and Gram(-) bacteria cells. This kit process does not require mechanical homogenization, so total hands on work time is only less 30 minutes.

The purified genomic DNA is fully digestible with all restriction enzymes tested, and is completely compatible with PCR and Gene analysis.

• Simple Procedure

PrimePrep Genomic DNA Extraction Kit from Blood (K-2000)		PrimePrep Genomic DNA Extraction Kit from Tissue (K-3000)
Lysis & Incubation at 56℃ for 10 min & add Ethanol		Lysis & Incubation at 56℃ & add GB buffer & add Ethanol
Transfer the supernatant to the spin column		Transfer the supernatant to the spin column
Wash X 2		Wash X 2
Elution		Elution
whole blood plasma serum buffy cost body fluids		Mammalian cells Tissue Bacterial cell (Gram)

Cat. No.	Pack Size	Supplied with / Remarks
K - 2000	PrimePrep Genomic DNA Extraction Kit from Blood : 50 prep	1. Spin Column 50 ea 2. collection tube 100 ea 3. Buffer GB 12 mL 4. Buffer GW1 20 mL 5. Buffer GW2 10 mL 6. Buffer GE 10 mL 7. Proteinase K Solution (20mg/ml) 1.2 mL
K - 3000	PrimePrep Genomic DNA Extraction Kit from Tissue : 50 prep	1. Spin Column 50 ea 2. collection tube 100 ea 3. Buffer TL 20 mL 4. Buffer GB 12 mL 5. Buffer GW1 20 mL 6. Buffer GW2 10 mL 7. Buffer GE 10 mL 8. Proteinase K Solution (20mg/ml) 1.2 mL

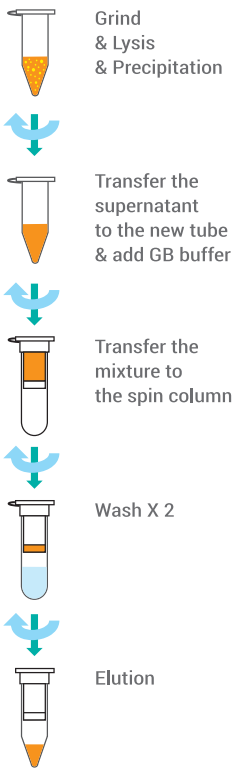
PrimePrep Genomic DNA Extraction Kit from Plant

• Description

PrimePrep Genomic DNA Extraction Kit from Plant is designed for the rapid preparation of genomic DNA from plant tissue and food (for GMO detection). This kit process does not require mechanical homogenization, so total hands on work time is only less 30 minutes

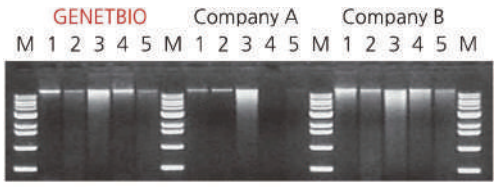
• Simple Procedure

▸ PCR test with extracted plant genomic DNA

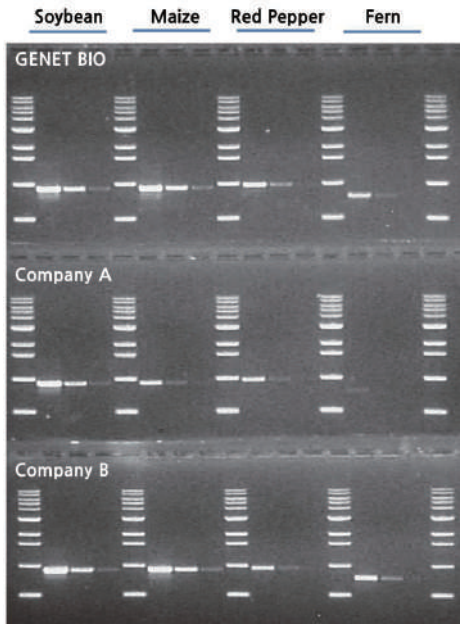


▸ Plant : seeds, roots, leves, stems, etc
▸ GMO detection : Maize, Soybean, Processed food, etc

• Performance



M: 1 kb DNA ladder
lane 1: Soybean (20 mg)
lane 2: Maize (20 mg)
lane 3: Red Pepper (100 mg)
lane 4: Fern (20 mg)
lane 5: Rice (50 mg)



Cat. No.	Pack Size	Supplied with / Remarks	
K - 4000	PrimePrep Genomic DNA Extraction Kit from Plant : 50 prep	1. Spin Column	50 ea
		2. collection tube	100 ea
		3. Buffer PTL	22 mL
		4. Buffer PPT	7 mL
		5. Buffer PGB	25 mL
		6. Buffer GW1	20 mL
		7. Buffer GW2	10 mL
		8. Buffer GE	10 mL
		9. Enzyme Solution	1.2 mL X 2

DNA Purification Kits

PrimePrep PCR Purification Kit

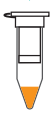
PrimePrep Gel Purification Kit

• Description

PrimePrep PCR Purification Kit and PrimePrep Gel Purification Kit offer simple, rapid and cost-effective method for purification from. PCR/enzyme reaction mixtures and agarose gel in TAE or TBE buffer system.
The purified DNA fragment can be directly used in ligation, sequencing and other downstream applications.

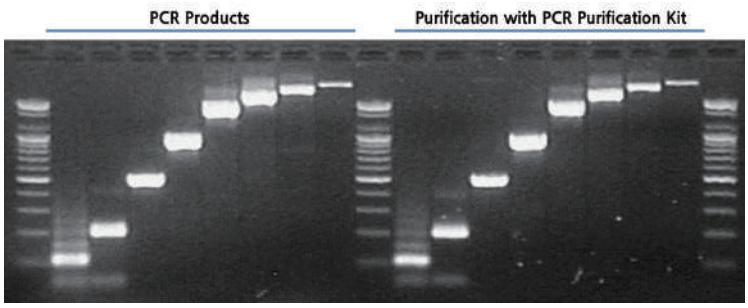
• Simple Procedure

▸ Performance data of PrimePrep PCR Purification Kit

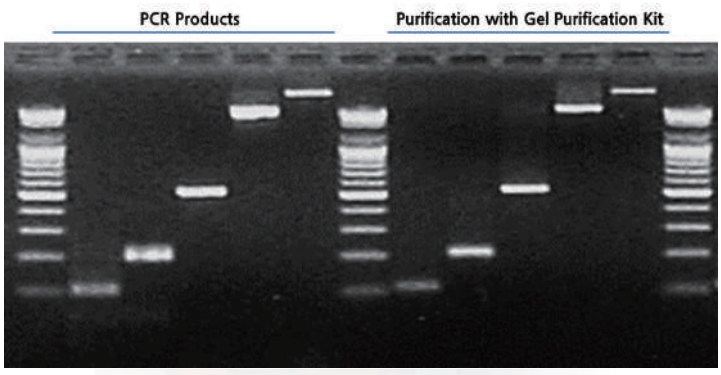
PrimePrep PCR Purification Kit (K-7000)		PrimePrep Gel Purification Kit (K-8000)
PCR products + Binding buffer		Gel + Binding buffer & Incubation at 50℃ for 5~10 min & add Isopropanol
Transfer the supernatant to the spin column		Transfer the supernatant to the spin column
Wash		Wash X 2
Elution		Elution
PCR Product Enzymatic reaction clean up		Agarose Gel

• Performance

PCR Products size: 108 bp, 208 bp, 500 bp, 1 kb, 2 kb, 3 kb, 4 kb, 5 kb



PCR Products size: 108 bp, 208 bp, 500 bp, 1 kb, 2 kb, 3 kb, 4 kb, 5 kb



Cat. No.	Pack Size	Supplied with / Remarks	
K - 7000	PrimePrep PCR Purification Kit : 50 prep	1. Spin Column 2. Buffer PCR-B 3. Buffer PW 4. Buffer PE	50 ea 30 mL 10 mL 10 mL
K - 8000	PrimePrep Gel Purification Kit : 50 prep	1. Spin Column 2. Buffer Gel-B 3. Buffer PW 4. Buffer PE	50 ea 30 mL X 2 10 mL 10 mL

PrimePrep Direct PCR Reagent

• Description

PrimePrep Direct PCR Reagent is rapid genomic DNA extraction solution from blood, hair roots, leaf, seed, meat tissue, mouse tail, etc. in 10 minutes. Also, we strongly recommend that use the hot-start Taq DNA Polymerase (HS Prime Taq DNA Polymerase, G-7000 & G-7100) for get good PCR results.

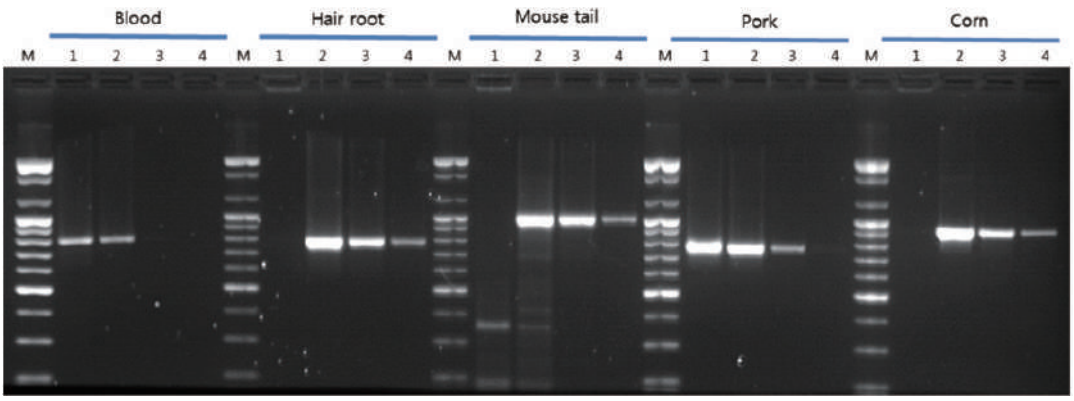
• Performance

▸ Experimental Procedure.

1. Boiling at 95˚C, 10 minutes with blood (5 µl), hair roots (5 ea), mouse tail (3 mg), pork tissue (5 mg) and corn (5 mg).
2. PCR test with each diluted genomic DNA sample 2 µl in PCR reaction volume 20 µl by HS Prime Taq Premix (G-7100).

▸ Target gene and PCR products size

- Human blood & hair root: CSTB gene, 790 bp
- Mouse tail: Hoxd-3 gene, 1000 bp
- Pork tissue: CPNE1 gene, 775 bp
- Corn: atpB/rbcL gene, 970 bp



Lane 1: PCR test with original eluted genomic DNA sample 2 µl
Lane 2: PCR test with 1/10 diluted genomic DNA sample 2 µl
Lane 3: PCR test with 1/100 diluted genomic DNA sample 2 µl
Lane 4: PCR test with 1/1,000 diluted genomic DNA sample 2 µl

Cat. No.	Pack Size	Supplied with / Remarks
K - 9000	PrimePrep Direct PCR Reagent : 30 mL	

RNA Purification Kits

RNA Purification Kits

Simple Procedure of RNA Purification Kits

PrimePrep Blood RNA Extraction Kit

On ice 10 min.
Pulse vortexing x 2

Remove the supernatant
Add BRR buffer
Pulse vortexing

Remove the supernatant
Add BRR buffer and
β-mercapto ethanol
Pulse vortexing

Transfer the mixture
to the spin column 1

Transfer the flow-through
into a new EP tube
add ethanol

Transfer the mixture
to the spin column 2

Wash X 3

Elution

whole blood

PPrimePrep Viral RNA/DNA Extraction Kit

Lysis
& add isopropanol

Transfer the
mixture to the
spin column

Wash X 2

Elution

plasma
serum
cell-free body fluids
cell-culture supernatants
virus-infected samples

Keynote of RNA Purification Kits

Use of unique RNA binding filter

- RNA binding capacity increases compared with RNA binding filter used by other existing companies.
- Hardly exist any hangover of ethanol because it is much thinner during the ethanol washing (the minimum of obstructive factors to sequencing or limited enzymatic reaction).
- Maximize the volume of refined total RNA.

Adoption of attached cap spin column

- minimize cross-contamination which can occur in case of isolation a great case of samples.

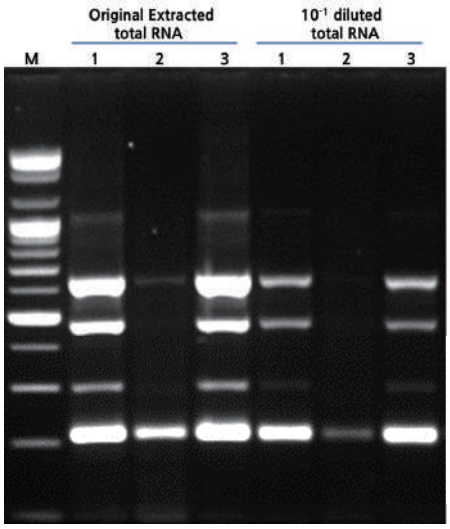
PrimePrep Blood RNA Extraction Kit

• Description

PrimePrep Blood RNA Extraction Kit is providea fast and easy method for the preparation of total cellular RNA from up to 1.5 ml of whole blood.
Contaminants and enzyme inhibitors such as hemoglobin and heparin are completely removed.
PrimePrep Blood RNA Extraction Kit represents a technology for total RNA preparation that combines the selective binding properties of microfiber - silica - based membrane with centrifugation.
Purified total RNA ready for use in down stream applications such as RT - PCR, cDNA synthesis and real - time PCR etc.

• Performance

- Performance data of PrimePrep Blood RNA Extraction Kit.
  - PCR test with total RNA from Blood by GENET BIO Blood RNA Extraction Kit and other company's Blood RNA Extraction Kits.
  - Multi - plex PCR test was performed with SuPrimeScript RT - PCR Kit (SR - 6000).
- Target gene and PCR product size.
  Human GAPDH (617 bp), Human PPI (462 bp), Human GPRT (299 bp), Human Actin (200 bp).
- lane 1: Supplier Q, lane 2: Supplier I, lane 3: GENET BIO



Cat. No.	Pack Size	Supplied with / Remarks	
KR - 1000	PrimePrep Blood RNA Extraction Kit : 50 Prep	1. Spin Column 1 (Blue O - ring)	50 ea
		2. Spin Column 2	50 ea
		3. Collection tube	150 ea
		4. Buffer BRR	200 mL X 2
		5. Buffer BRL	40 mL
		6. Buffer BRW1	20 mL
		7. Buffer BRW2	11 mL
		8. Buffer BRE	10 mL

RNA Purification Kits

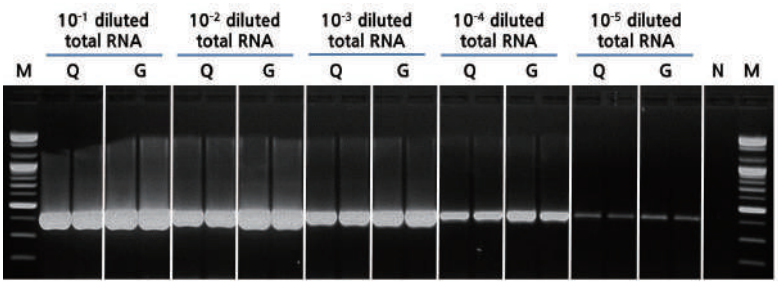
PrimePrep Viral RNA/DNA Extraction Kit

• Description

PrimePrep Viral RNA/DNA Extraction Kits provide a fast and easy method for the preparation of viral RNA and DNA from plasma, serum, cell - free body fluids, cell - culture supernatants and virus - infected samples.
PrimePrep Viral RNA/DNA Extraction Kit buffer system provides the effective binding condition of RNA and DNA to microfiber - silica - based membrane through mix with lysis and binding buffers.
And then the impurities on the membrane are washed away by two different wash buffers.
Purified total RNA/DNA ready for use in downstream applications such as RT - PCR, cDNA synthesis and real - time PCR etc.

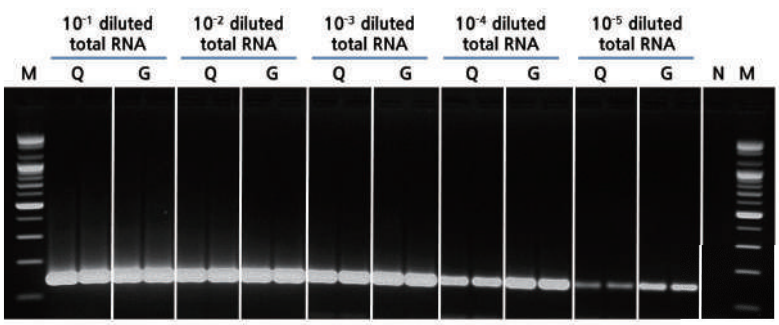
• Performance 1

- Performance data of PrimePrep Viral RNA/DNA Extraction Kit.
  - PCR test with total RNA from virus infected plant leaf by GENET BIO Viral RNA/DNA Extraction Kit and other company Viral RNA Mini Kit.
  - PCR test was performed with SuPrimeScript RT - PCR Kit (SR - 6000).
- Target virus and PCR product size
  Cucumber Mosaic Virus (CMV) 400 bp
- lane Q: Supplier Q, lane G: GENET BIO



• Performance 2

- Performance data of PrimePrep Viral RNA/DNA Extraction Kit.
  - PCR test with total RNA from virus cell culture by GENET BIO Viral RNA/DNA Extraction Kit and other company Viral RNA Mini Kit.
  - PCR test was performed with SuPrimeScript RT - PCR Kit (SR - 6000).
- Target virus and PCR product size
  Canine Parvo Virus (CPV) 142 bp
- lane Q: Supplier Q, lane G: GENET BIO



Cat. No.	Pack Size	Supplied with / Remarks	
KR - 2000	PrimePrep Viral RNA/DNA Extraction Kit : 50 prep	1. Spin Column 2. Collection tube 3. Buffer VRL 4. Buffer VRW1 5. Buffer VRW2 6. Buffer VRE	50 ea 100 ea 40 mL 20 mL 11 mL 10 mL

Other Enzymes

Other Enzymes

RNase A Solution

Concentration: 10 mg/ml
Volume: 2 mL (1 mL x 2 tubes)
Storage buffer: 10 mM Tris - HCl and 15 mM NaCl, pH 7.5

Proteinase K Solution

Concentration: 20 mg/ml
Volume: 1 mL
Storage buffer: 50 mM Tris - HCl, 1 mM $CaCl_2$ and 50% Glycerol, pH 8.5

UDG (Uracil - DNA Glycosylase)

Concentration: 1 unit/μl
Volume: 250 units
Storage buffer: 30 mM Tris - HCl, 150 mM NaCl, 1 mM DTT, 0.05% (v/v) Tween20 and 50% Glycerol, pH 7.5

Cat. No.	Pack Size	Supplied with Remarks
B - 2007	RNase A Solution (10 mg/ml) : 1.0 mL x 2 tubes	
B - 2008	Proteinase K solution (20 mg/ml) : 1.0 mL	
B - 2014	Uracil - DNA - Glycosylase: 250 units	

DNA Markers

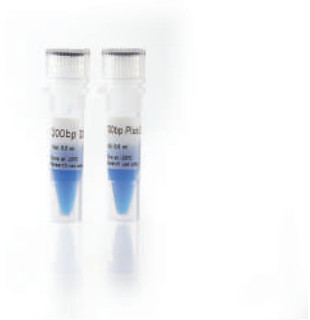
100 bp DNA Marker

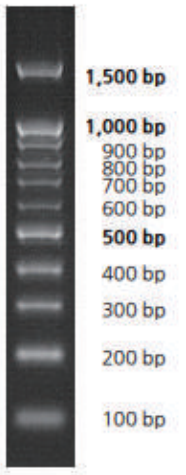
Recommended loading : 3.0 µl / 5 mm lane width

Number of band : 11

Size range : 100 ~ 1,500 bp

Storage buffer : 10 mM Tris(pH 8.0), 1 mM EDTA, 2.5% Ficoll,
0.005% Bromophenol Blue, 0.005% Xylene Cyanol





4.0㎕/ 5 mm lane width
1.8% TBE agarose gel with stained EtBr

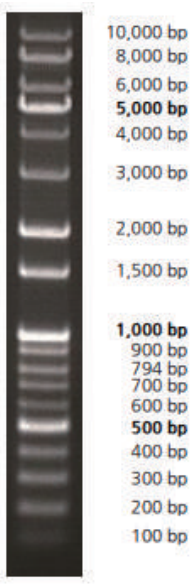
100 bp Plus DNA Marker

Recommended loading : 4.0 ~5.0 ul/5 mm lane width

Number of band : 18

Size range : 100 ~ 10,200 bp

Storage buffer : 10 mM Tris(pH 8.0), 1 mM EDTA, 2.5% Ficoll,
0.005% Bromophenol Blue, 0.005% Xylene Cyanol



5.0㎕ loading/ 5 mm lane width
1.0% TAE agarose gel with stained EtBr

Cat. No.	Pack Size	Supplied with / Remarks
M - 1000	100 bp DNA Marker: 0.5 mL	
M - 2000	100 bp Plus DNA Marker: 0.5 mL	

Agarose & Pre - made Buffers

Agarose LE	
Gelling Temperature	36˚C
Melting Temperature	< 88˚C
Gel Strenght (1%)	> 1200 g/cm²
Electroendosmosis (EEO)	< 0.12
Sulfate	< 0.15%
Moisture	< 10%
DNase/ RNase	Not detected

Pre - made Buffers	
Product Name	Composition
50X TAE	2.0 M Tris-acetate, pH 8.3, 50 mM EDTA
5X TBE	0.89 M Tris-borate, pH 8.3, 20 mM EDTA
10X TE Buffer (pH 8.0)	0.1 M Tris-HCl, pH 8.0, 10 mM EDTA
6X DNA Loading Buffer	60 mM Tris-HCl, pH 8.0, 6 mM EDTA, 15% Ficoll, 0.03% Bromophenol blue, 0.03% xylene cyanol FF
10X PBS (pH 7.4)	0.1 M Phosphate, pH 7.4, 1.38 M NaCl, 27 mM KCl
Water, DEPC treated	Treated with 0.1% DEPC (diethylpyrocarbonate)

Cat. No.	Pack Size	Supplied with / Remarks
B - 2000	Agarose LE : 100 g	
B - 2001	50X TAE : 1.0 L	
B - 2002 -1	5X TBE : 1.0 L	
B - 2005	10X TE Buffer (pH 8.0) : 100 mL	
B - 2006	6X DNA Loading Buffer : 5 mL X 2	
B - 2012	10X PBS (pH 7.4) : 500 mL	
B - 2013	Water, DEPC treated : 250 mL	

Pathogenic Bacteria Detection Kits

Pathogenic Bacteria Detection Kits

Group	Cat.No.	Supplied with / Remarks
E.coli Detection	E - 1000	ipaH, vt1, vt2, bfpA, aggR, eaeA, stp, sth, lt
	E - 2000	ipaH, bfpA, aggR, eaeA
	E - 3000	vt1, vt2, stp, sth, lt
Clostridium perfringens Detection	E - 4000	cpa, cpe
Bacillus cereus Detection	E - 5000	CytK2, nheA, bceT, CER, entFM, hblC
Campylobacter Detection	E - 6000	hipO(jejuni), glyA(coli)
Vibrio Detection	E - 7000	vvhA(vulnificus), hlyA(cholera), tlh(paraharmolyticus)
Pathogenic Gram Positive / Negative Bacteria Detection	E - 9000	femA, prfA, 16s rRNA, tcdB, cpa, cpe
	E - 9100	frsZ, invA, 16s rRNA, ipaH, invA
CRE & CRE -4 Screening	E - 9500	OXA, GES, NDM, VIM, KPC, IMP
	E - 9600	SME, SIM, GIM, SPM

Pathogenic E. coli Detection Kits

• Description

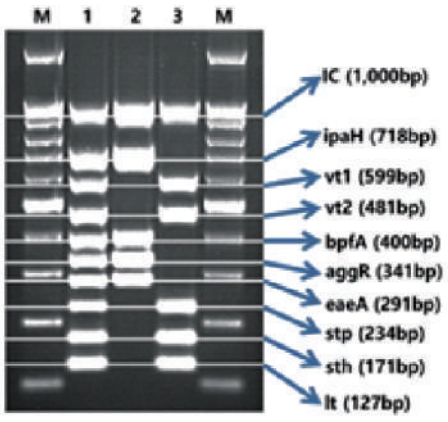
Pathogenic E. coli Detection Kits consists of HS Prime Taq Premix (with UDG), primer mixture and control DNA as ladder. Especially, the UDG (Uracil-DNA Glycosylase) is included in HS Prime Taq Premix and catalyses the release of free uracil from uracil-containing DNA.
So the cross-contamination of PCR products is protected.

• Components

1. Multi HS Prime Taq Premix (with UDG) 96 tests X 1 plate
2. Primer Mixture 0.5 mL X 1 tube
3. Positive Control DNA (for PCR) 60 µl X 1 tube

• Performance

- EAEC: Enteroaggregative E. coli
- EPEC: Enteropathogenic E. coli
- ETEC: Enterotoxigenic E. coli
- EHEC: Enterohaemorrhagic E. coli
- EIEC: Enteroinvasive E. coli



Lane M: 100bp DNA Marker (Cat. No. M-1000)
Lane 1: E.coli Detection Kit (Cat. No. E-1000)
Lane 2: EAEC/EPEC/EIEC Detection Kit (Cat. No. E-2000)
Lane 3: ETEC/EHEC Detection Kit (Cat. No. E-3000)

Cat. No.	Pack Size	Supplied with / Remarks
E - 1000	E. coli Detection Kit (multi) : 96 tests	- Primer mixture - Positive Control DNA (for PCR)
E - 2000	EAEC / EPEC / EIEC Detection Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)
E - 3000	ETEC / EHEC Detection Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)

Pathogenic Bacteria Detection Kits

Pathogenic Bacteria Detection Kits

• Description

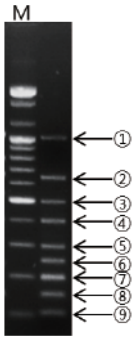
Pathogenic Bacteria Detection Kits consists of HS Prime Taq Premix (with UDG), primer mixture and control DNA as ladder. Especially, the UDG (Uracil DNA Glycosylase) is included in HS Prime Taq Premix and catalyses the release of free uracil from uracil-containing DNA.
So the cross-contamination of PCR products is protected.

• Components

1. Multi HS Prime Taq Premix (with UDG) 96 tests X 1 plate
2. Primer Mixture 0.5 mL X 1 tube
3. Positive Control DNA (for PCR) 60 µl X 1 tube

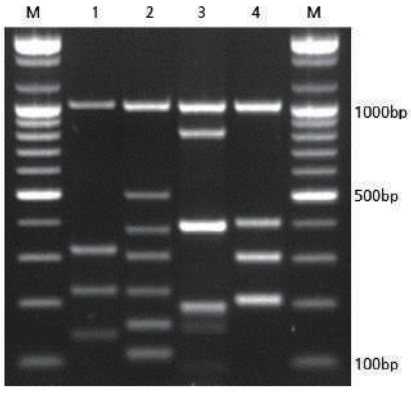
• Performance

▸ Pathogenic Bacteria Screening Kit

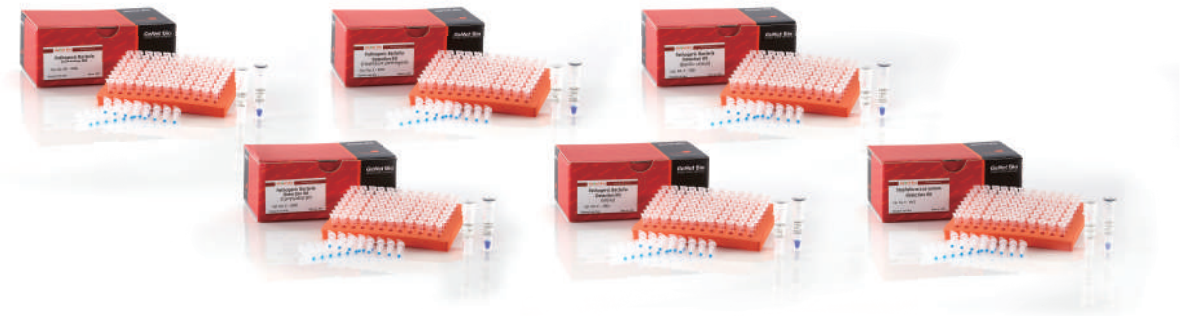


M: 100 bp DNA Maker (Cat. No. M-1000)
① 1000 bp Internal control
② 658 bp *Staphylococcus aureus*
③ 500 bp *Vibrio spp.*
④ 400 bp *Clostridium perfringens*
⑤ 300 bp *Campylobacter jejuni*
⑥ 250 bp *Yersinia enterocolitica*
⑦ 200 bp *Bacillus cereus*
⑧ 150 bp *Listeria monocytogenes*
⑨ 100 bp *Salmonella spp.*

▸ Pathogenic Bacteria Detection Kit



Lane M: 100bp DNA Marker (Cat. No. M-1000)
Lane 1: Clostridium perfringens Detection (E-4000)
Lane 2: Bacillus cereus Detection (E-5000)
Lane 3: Campylobacter Detection (E-6000)
Lane 4: Vibrio Detection (E-7000)



Cat. No.	Pack Size	Supplied with / Remarks
E - 4000	Clostridium perfringens Detection Kit : 96 tests	- Primer mixture - Control DNA (as ladder, 100 ul X 1)
E - 5000	Bacillus cereus Detection Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)
E - 6000	Campylobacter Detection Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)
E - 7000	Vibrio Detection Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)

Pathogenic Gram Positive / Negative Bacteria Detection Kit

Pathogenic Gram Positive/ Negative Bacteria Detection Kit

• Description

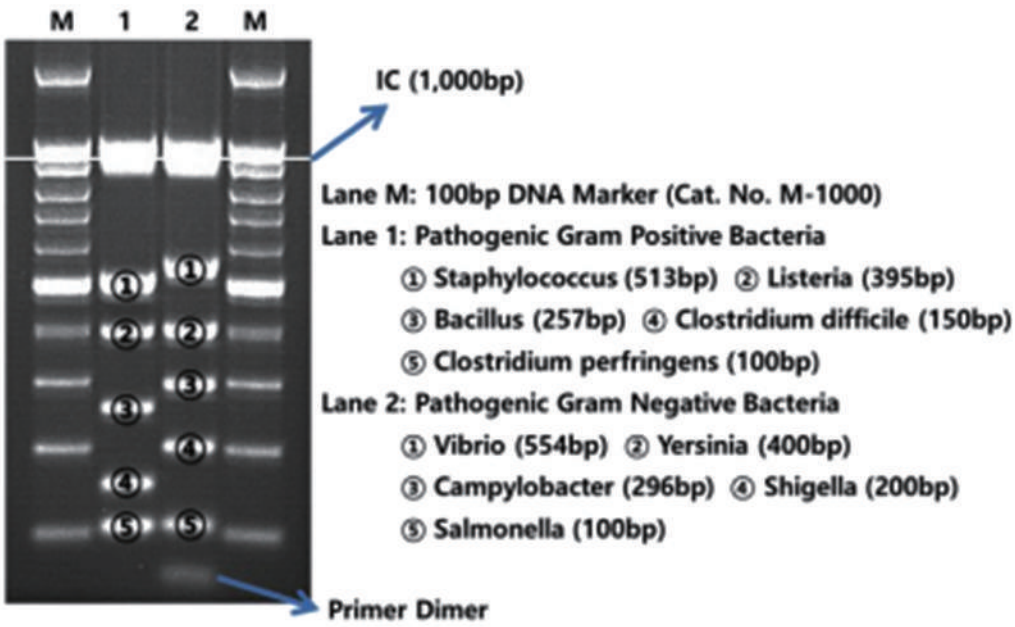
Pathogenic Gram Positive/ Negative Bacteria Detection Kit consists of HS Prime Taq Premix (with UDG), primer mixture and control DNA as ladder.
Especially, the UDG (Uracil DNA Glycosylase) is included in HS Prime Taq Premix and catalyses the release of free uracil from uracil-containing DNA.
So the cross-contamination of PCR products is protected.

• Components

1. Multi HS Prime Taq Premix (with UDG) 96 tests X 1 plate
2. Primer Mixture 0.5 mL X 1 tube
3. Control DNA (as ladder) 100 μl X 1 tube

• Performance

▸ Pathogenic Gram Positive Bacteria(PGPB) Detection Kit , Pathogenic Gram Negative Bacteria(PGNB) Detection Kit



Cat. No.	Pack Size	Supplied with / Remarks
E - 9000	Pathogenic Gram Positive Bacteria(PGPB) Detection Kit : 96 tests	- Primer mixture - Control DNA (as ladder)
E - 9100	Pathogenic Gram Negative Bacteria(PGNB) Detection Kit : 96 tests	- Primer mixture - Control DNA (as ladder)

CRE & CRE - 4 Screening Kit

CRE & CRE - 4 Screening Kit

• Description

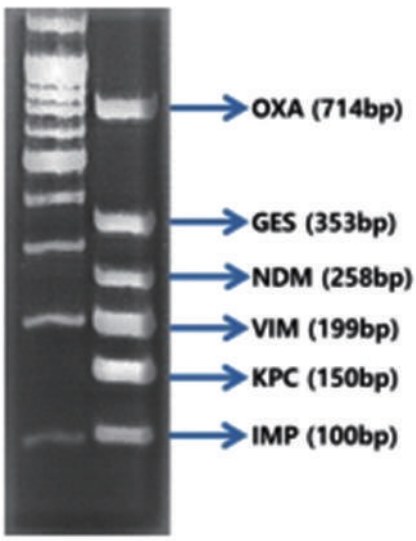
CRE & CRE - 4 Screenig kits consists of HS Prime Taq Premix (with UDG), primer mixture and Positive control DNA .
Especially, the UDG (Uracil DNA Glycosylase) is included in HS Prime Taq Premix and catalyses the release of free uracil from uracil - containing DNA.
So the cross - contamination of PCR products is protected.

• Components

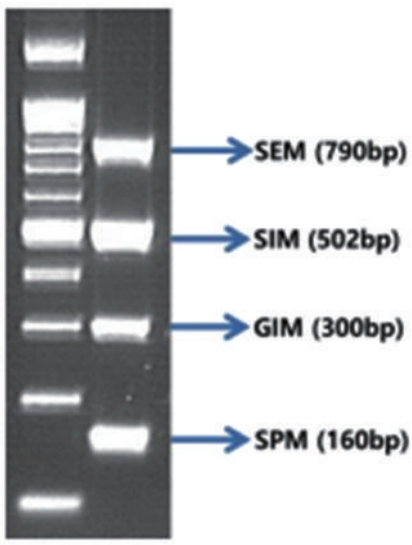
1. Multi HS Prime Taq Premix (with UDG) 96 tests X 1 plate
2. Primer Mixture 0.5 mL X 1 tube
3. Positive Control DNA (for PCR) 60 µl X 2 tubes

• Performance

▸ CRE Screening Kit



▸ CRE - 4 Screening Kit

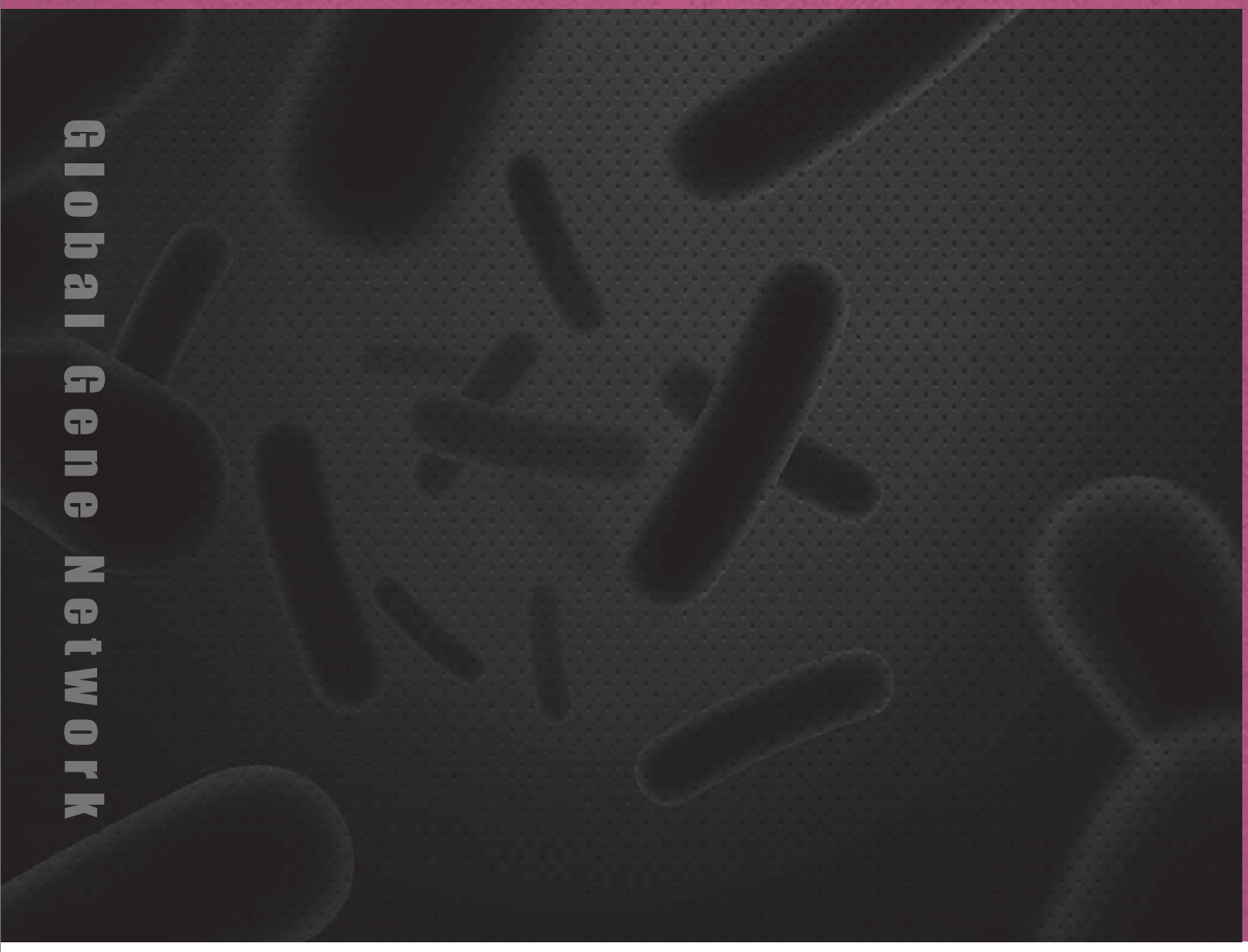


Cat. No.	Pack Size	Supplied with / Remarks
E - 9500	CRE Screening Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)
E - 9600	CRE - 4 Screening Kit : 96 tests	- Primer mixture - Positive Control DNA (for PCR)

Animal Disease Detection Kit

Group	Animal	Product Name	Target	Cat. No.	Size
Real-time PCR (qPCR, qRT-PCR for TaqMan Probe)	Porcine	Prime ·Q PRRSV Detection Kit	NA/EU	ADP-1000Q	50 tests
		Prime ·Q PCV2 Detection Kit	PCV2	ADP-1100Q	50 tests
		Prime ·Q PEDV, TGEV Detection Kit	PEDV, TGEV	ADP-1200Q	50 tests

NEW PARADIGM OF BIOTECHNOLOGY



GLOBAL GENE NETWORK
GENETBIO

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