

Cica Geneus® Purification Kit Series



Kanto Reagents

Cica Geneus® Purification Kit help with successful experiments!



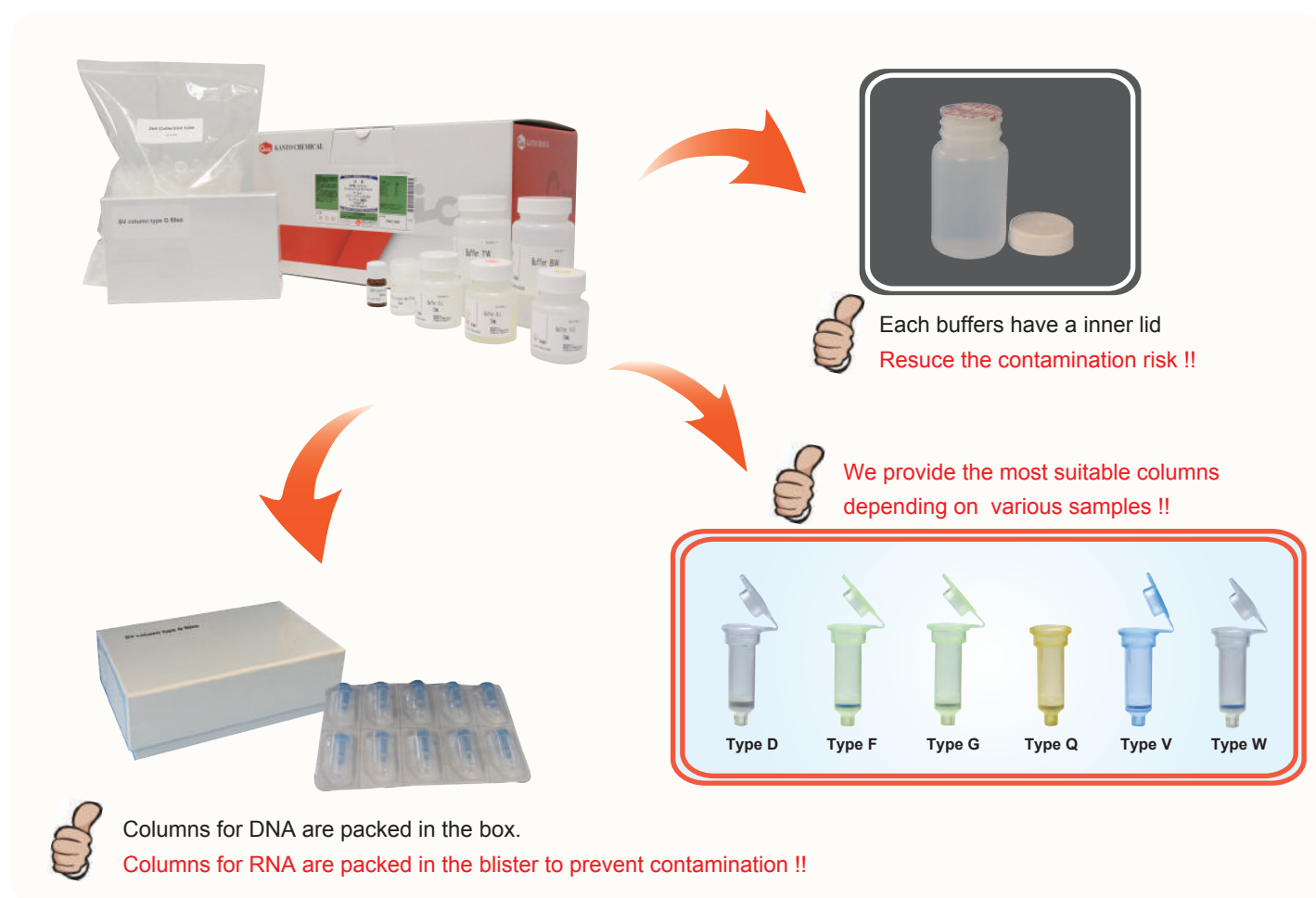
Product Information

Product No.	Product Name	Stored at	Size
08197-96	Cica Geneus® DNA Prep Kit (for Blood & Tissue)	RT	100 preps
08204-96	Cica Geneus® Total DNA Prep Kit (for Tissue)	RT	100 preps
08204-97			250 preps
08202-96	Cica Geneus® DNA Prep Kit (for Plant)	RT	100 preps
08203-96	Cica Geneus® DNA Prep Kit (for Stool)	RT	50 preps
08207-96	Cica Geneus® Plasmid Prep Kit	RT	50 preps
08207-97			200 preps
08206-96	Cica Geneus® PCR Prep Kit	RT	50 preps
08208-96	Cica Geneus® Gel Prep Kit	RT	50 preps
08111-96	Cica Geneus® PCR & Gel Prep Kit	RT	50 preps
08111-97			200 preps
08215-96	Cica Geneus® DNA/RNA Prep Kit (for Virus)	2~8℃	50 preps
08057-96	Cica Geneus® RNA Prep Kit (for Tissue)	RT	50 preps
08058-96	Cica Geneus® RNA Prep Kit (for Plant)	RT	50 preps



KANTO CHEMICAL
















Cica Geneus[®] Purification Kit Appearance













Product Name	Binding capacity	Minimum elution volume	Yield/Recovery	Operation time
Cica Geneus [®] DNA Prep Kit (for Blood & Tissue)	60 µg	30 µL	20~60 µg	25~220 min
Cica Geneus [®] Total DNA Prep Kit (for Tissue)	50 µg	30 µL	5~50 µg	25~220 min
Cica Geneus [®] DNA Prep Kit (for Plant)	40 µg	30 µL	4~40 µg	~40 min
Cica Geneus [®] DNA Prep Kit (for Stool)	100 µg	30 µL	5~100 µg	~25 min
Cica Geneus [®] Plasmid Prep Kit	30 µg	40 µL	85~95%	~23 min
Cica Geneus [®] PCR & Gel Prep Kit or PCR Prep Kit	10 µg	30 µL	90~95% (100 bp~10 kb)	~5 min
Cica Geneus [®] PCR & Gel Prep Kit or Gel Prep Kit	10 µg	30 µL	70~85% (80 bp~10 kb)	~15 min
Cica Geneus [®] DNA/RNA Prep Kit (for Virus)	100 µg	30 µL	—	~20 min
Cica Geneus [®] RNA Prep Kit (for Tissue)	100 µg	40 µL	~20 µg (cell) ~50 µg (Tissue)	~15 min
Cica Geneus [®] RNA Prep Kit (for Plant)	100 µg	30 µL	~50 µg	~25 min

Cica Geneus[®] Purification Kit Selection Guide

Meaning of the icons

 Animal Tissue/Mouse tail	 Mammalian whole blood	 Callus	 PCR products
 Cultured cells	 Insect / Worm	 Fungi	 Agarose gel
 Gram(+) bacteria	 Buccal swab/Buffy coat/ Hair/Body fluid/Saliva/ Sperm	 Stool	 Cultured cells/Plasma/ Serum/swab/Urine
 Gram(-) bacteria	 Plant cells/Plant tissue	 Escherichia coli	

Selection Guide

Type of the nucleic acid		Sample		Recommended product
DNA	Genome	Whole blood Insect/Worm Mouse tail	Animal tissue Cultured cells Gram(-) bacteria	Cica Geneus [®] DNA Prep Kit (for Blood & Tissue) 
		Animal tissue Cultured cell Gram(+) bacteria Gram(-) bacteria Whole blood Buccal swab Streptococcus pneumoniae	Buffy coat Hair Body fluid Saliva Sperm Mouse tail	Cica Geneus [®] Total DNA Prep Kit (for Tissue) 
		Plant cells Plant tissue	Callus Fungi	Cica Geneus [®] DNA Prep Kit (for Plant) 
		Stool		Cica Geneus [®] DNA Prep Kit (for Stool) 
	Plasmid	Escherichia coli		Cica Geneus [®] Plasmid Prep Kit 
	Fragment DNA	PCR products		Cica Geneus [®] PCR & Gel Prep Kit or PCR Prep Kit 
		Agarose gel		Cica Geneus [®] PCR & Gel Prep Kit or Gel Prep Kit 
DNA/RNA	Viral nucleic acid	Cultured cells Plasma Serum	Swab Urine	Cica Geneus [®] DNA/RNA Prep Kit (for Virus) 
RNA	total RNA	Animal tissue Cultured cells Whole blood cell	Bacteria	Cica Geneus [®] RNA Prep Kit (for Tissue) 
		Plant cells Plant tissue		Cica Geneus [®] RNA Prep Kit (for Plant) 



Cica Geneus[®] DNA Prep Kit (for Blood & Tissue)

Product No.

Size

08197-96

100 preps

Protocol for Animal Tissue

Lyse

- 1) Sample 25 mg
- 2) ②Buffer TL : 200 μ L
Vortex for 1 min
- 3) Proteinase K solution : 20 μ L
Vortex for 1 min

Incubate at 56°C until the sample is completely lysed

- 4) ③Buffer TB : 400 μ L
Vortex
Centrifuge for 1 min at 6,000 \times g

Bind

Transfer the mixture to the Gene All SV Column type G

Wash

- Centrifuge for 1 min at 6,000 \times g
- Transfer to a new collection tube
- 5) ④Buffer BW : 600 μ L
- Centrifuge for 30 sec at 6,000 \times g
- Transfer to a new collection tube
- 6) ⑤Buffer TW : 700 μ L
- Centrifuge for 30 sec at 6,000 \times g
- Discard the pass-through and reinsert

Elute

- Centrifuge for 30 sec at full speed
- Place the column in a fresh 1.5 mL tube
- 7) ⑥Buffer AE : 200 μ L
(or sterilized water)
Incubate for 2 min
- Centrifuge for 1 min at 13,000 \times g

DNA solution

Cica Geneus[®] DNA Prep Kit (for Blood & Tissue) provides a simple and rapid method for the isolation of totalDNA from animal tissues, whole blood, and cultured cells. The pure DNA can be acquired and this can be directly used in various applications such as PCR, Southern blotting and other enzymatic reactions.

Specifications

Sample size	Liquid : 300 μ L Solid : 25 mg
Maximum loading volume	750 μ L
Binding capacity	60 μ g
Elution volume	30~400 μ L

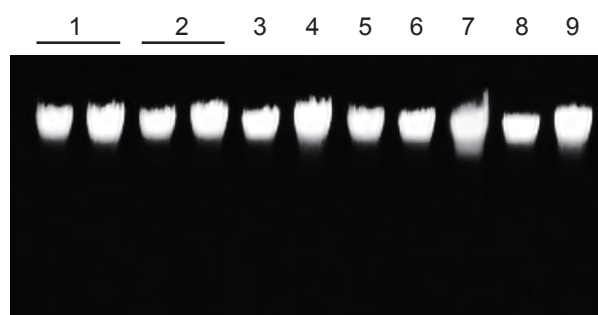
Kit Contents

Contents name	size
GeneAll SV Column Type G (with collection tube)	50 \times 2
Collection tube	100 \times 2
①Buffer RL	100 mL \times 1
②Buffer TL	30 mL \times 1
③Buffer TB	50 mL \times 1
④Buffer BW	80 mL \times 1
⑤Buffer TW	100 mL \times 1
⑥Buffer AE	30 mL \times 1
⑦Proteinase K	48 mg \times 1
⑧Storage Buffer	4 mL \times 1

DNA Purification from various samples

DNA prepared from several kind of animal tissue using Cica Geneus[®] DNA Prep Kit (for Blood & Tissue). Elution was performed with 100 μ L of ⑥Buffer AE.

8 μ L of lates was resolved on 0.8 % agarose gel.



Lane 1 : Liver (rat)
Lane 2 : Kidney (rat)
Lane 3 : Brain (rat)
Lane 4 : Spleen (rat)

Lane 5 : Lung (rat)
Lane 6 : Heart (rat)
Lane 7 : NIH/3T3 cell
Lane 8 : Blood (bovine)
Lane 9 : Liver (bovine)



Cica Geneus[®] Total DNA Prep Kit (for Tissue)

Product No.	Size
08204-96	100 preps
08204-97	250 preps

Related reagent

Product No.	Product Name	Size
14032-08	Ethanol (99.5)	500 mL

Cica Geneus[®] Total DNA Prep Kit (for Tissue) provides an easy and rapid method for the isolation of total DNA such as genomic, mitochondrial, bacterial, parasite or viral DNA from various samples including tissues, whole blood, cultured cells, and body fluids. The purified DNA is suitable for PCR, Southern blotting other enzymatic reactions, and etc.

Specifications

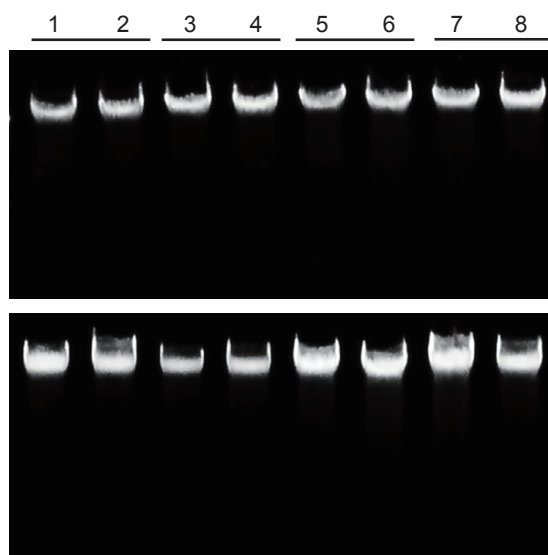
Sample size	Liquid : 200 μ L Solid : 20 mg
Maximum loading volume	700 μ L
Binding capacity	50 μ g
Elution volume	30~400 μ L

Kit Contents

Contents name	100 preps	Size 250 preps
GeneAll SV Column Type G (with collection tube)	50 \times 2	50 \times 5
Collection tube	100 \times 2	250 \times 2
①Buffer CL	25 mL \times 1	60 mL \times 1
②Buffer BL	25 mL \times 1	60 mL \times 1
③Buffer BW	80 mL \times 1	220 mL \times 1
④Buffer TW	100 mL \times 1	250 mL \times 1
⑤Buffer AE	30 mL \times 1	60 mL \times 1
⑥Proteinase K	48 mg \times 1	120 mg \times 1
⑦Storage Buffer	4 mL \times 1	7 mL \times 1

DNA purification from Whole blood

DNA purified from whole blood using Cica Geneus[®] Total DNA Prep Kit (for Tissue) was resolved on 0.8 % agarose gel.



Lane 1,2 : Upper human blood A Lower rat blood A
Lane 3,4 : Upper human blood B Lower rat blood B
Lane 5,6 : Upper human blood C Lower rat blood C
Lane 7,8 : Upper human blood D Lower rat blood D

Protocol for Cultured Cell

Lyse

- 1) Proteinase K solution : 20 μ L
 - 2) Sample : 200 μ L
 - 3) ②Buffer BL : 200 μ L
- Vortex
- Incubate at 56°C until the sample is completely lysed
- 4) Ethanol : 200 μ L (not provided)
- Vortex
- Spin down

Bind

Transfer the mixture to the Gene All SV Column type G

Wash

- Centrifuge for 1 min at 6,000 \times g
- Transfer to a new collection tube
- 5) ③Buffer BW : 600 μ L
- Centrifuge for 30 sec at 6,000 \times g
- Transfer to a new collection tube
- 6) ④Buffer TW : 700 μ L
- Centrifuge for 1 min at 6,000 \times g
- Discard the pass-through and reinsert

Elute

- Centrifuge for 30 sec at full speed
- Place the column in a fresh 1.5 mL tube
- 7) ⑤Buffer AE : 200 μ L (or sterilized water)
- Incubate for 1 min
- Centrifuge for 1 min at 13,000 \times g

DNA solution



Cica Geneus[®] DNA Prep Kit (for Plant)

Product No.

Size

08202-96

100 preps

Protocol for Plant tissue

Lyse

Grind fresh (~100 mg) or frozen plant tissue(~25 mg) to a fine powder quickly and completely, using a mortar and pestle pre-cooled with liquid nitrogen



- 1) Sample
- 2) ①Buffer PL : 400 μ L
- 3) ⑥RNase A : 4 μ L

Vortex for 1 min

Incubate at 65°C for 10 ~ 15 min
* Mix 2 ~ 3 times by inverting



- 4) ②Buffer PD : 140 μ L
- Vortex

Incubate for 5 min on ice



Transfer the mixture to the EzSep filter



Centrifuge for 2 min at 14,000 \times g



- 5) Transfer to a new collection tube
- 6) ③Buffer BD : 1.5 vol of 5)

Bind



Transfer the mixture to the Gene All SV Column type G



Centrifuge for 30 sec at 10,000 \times g



- 7) ④Buffer CW : 700 μ L
- Discard the pass-through and reinsert



Centrifuge for 30 sec at 10,000 \times g



- 8) ④Buffer CW : 700 μ L
- ろ液を捨てカラムを再セット



Centrifuge for 2 min at 10,000 \times g

Elute



- 9) ⑤Buffer AE : 200 μ L
- Place the column in a fresh 1.5 mL tube
Incubate for 5 min



Centrifuge for 1 min at 10,000 \times g

DNA solution

Cica Geneus[®] DNA Prep Kit (for Plant) provides an easy and rapid method for the isolation of total DNA from various Plant. With EzSep filter and Column typeG, the procedure can be done in just 40 minutes (mini). The purified DNA is suitable for PCR, Southern blotting other enzymatic reactions, and etc.

Specifications

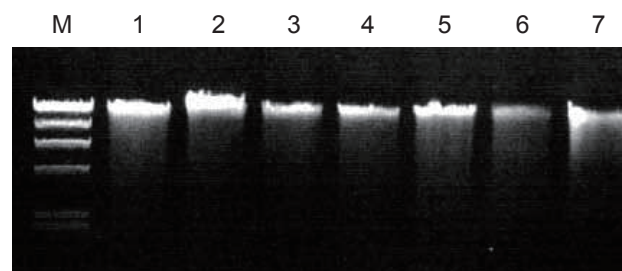
Sample size	Wet : 100 mg Dry : 25 mg
Maximum loading volume	750 μ L
Binding capacity	40 μ g
Elution volume	30~400 μ L

Kit Contents

Contents name	Size
GeneAll SV Column Type G (with collection tube)	50 \times 2
EzSep filter (with collection tube)	50 \times 2
①Buffer PL	100 mL \times 1
②Buffer PD	30 mL \times 1
③Buffer BD	110 mL \times 1
④Buffer CW	150 mL \times 1
⑤Buffer AE	60 mL \times 1
⑥RNase A (100 mg/ml)	480 μ L \times 1

DNA Purification from various samples

DNA was purified from each 100 mg of various samples Cica Geneus[®] DNA Prep Kit (for Plant). Elution was performed with 100 μ L of ⑤Buffer AE. 5 μ L of eluates was resolved on 0.8 % agarose gel.



M : Ladder

Lane 1 : Pine

Lane 2 : Tobacco

Lane 3 : Barely

Lane 4 : Cycad

Lane 5 : Cayenne

Lane 6 : Arabidopsis

Lane 7 : Potato



Cica Geneus[®] DNA Prep Kit (for Stool)

Product No.

08203-96

Size

50 preps

Protocol for Stool

Lyse

2.0 mL tube



- 1) Sample : ~200 mg
- 2) ①Buffer PBS : 1 mL
Vortex for 1 min
Incubate for 30 sec

Transfer the supernatant to a new 2.0 mL tube



Centrifuge for 2 min at full speed

- 3) Discard the supernatant



- 4) ②Buffer FL : 1.3 mL

Resuspend the pellet by pipetting
Incubate for 5 min

Centrifuge for 5 min at 10,000×g

Transfer the mixture to Gene All EzPass filter



Centrifuge for 1 min at 10,000×g

Transfer the Gene All EzPass filter to the new 1.5 mL tube



- 5) ③Buffer EB : 100 µL
Incubate for 1 min



Centrifuge for 1 min at 10,000×g



- 6) ④Buffer PB : 500 µL
Resuspend the pellet by pipetting

Bind

Transfer the mixture to Gene All SV Column type G



Centrifuge for 1 min at 10,000×g

Wash



Discard the pass-through and reinsert

- 7) ⑤Buffer NW : 500 µL



Centrifuge for 1 min at 10,000×g



Discard the pass-through and reinsert



Centrifuge for 1 min at 10,000×g

Elute

Place the column in a fresh 1.5 mL tube



- 8) ③Buffer EB : 50 µL
Incubate for 1 min



Centrifuge for 1 min at 10,000×g

DNA solution

Cica Geneus[®] DNA Prep Kit (for Stool) provides an easy and rapid method for the isolation of DNA from stool samples. The purified DNA is suitable for PCR, Southern blotting other enzymatic reactions, and etc.

Specifications

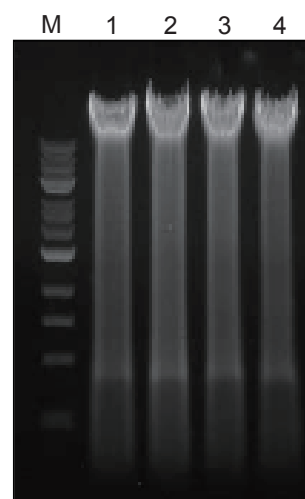
Sample size	200 mg (Stool)
Maximum loading volume	700 µL
Binding capacity	100 µg
Elution volume	30~200 µL

Kit Contents

Contents name	Size
GeneAll SV Column Type G (with collection tube)	50 ×1
GeneAll EzPass filter (with collection tube)	50 ×1
1.5 ml tube	50 ×2
2.0 ml tube	50 ×2
①Buffer PBS	60 mL×1
②Buffer FL	70 mL×1
③Buffer EB	15 mL×1
④Buffer PB	30 mL×1
⑤Buffer NW	30 mL×1

DNA purification from Chicken stool

DNA was purified from Chicken stool, using Cica Geneus[®] DNA Prep Kit (for Stool). Elution was performed with 50 µL of ③Buffer EB. 3 µL of eluates was resolved on 1.0 % agarose gel.



Lane 1-4 : Chicken stool
M : 1kb Ladder



Cica Geneus[®] Plasmid Prep Kit

Product No.	Size
08207-96	50 preps
08207-97	200 preps

Protocol

Lyse

- 1) Sample (bacterial cultures) : 5 mL
- Centrifuge for 1 min at full speed
- 2) ①Buffer S1 : 250 μ L
Resuspend the pellet by pipetting
- 3) ②Buffer S2 : 250 μ L
Mix 2 ~ 3 times by inverting
- 4) ③Buffer S3 : 350 μ L
Mix 2 ~ 3 times by inverting
- Centrifuge for 10 min at 10,000 \times g

Bind

Transfer the supernatant to
Gene All SV Column type Q

Wash

- Centrifuge for 30 sec at 10,000 \times g
- Discard the pass-through and reinsert
- 5) ④Buffer AW : 500 μ L
- Centrifuge for 30 sec at 10,000 \times g
- Discard the pass-through and reinsert
- 6) ⑤Buffer PW : 700 μ L
- Centrifuge for 30 sec at 10,000 \times g
- Discard the pass-through and reinsert
- Centrifuge for 30 sec at 10,000 \times g
- Place the column in a fresh 1.5 mL tube
- 7) ⑥Buffer EB : 50 μ L
Incubate for 1 min

Elute

Centrifuge for 1 min at 10,000 \times g

DNA溶液

Cica Geneus[®] Plasmid Prep Kit provides a convenient and rapid method for the isolation of plasmid DNA from bacterial cells. This kit eliminates the need of organic solvent extraction and alcohol precipitation, allowing rapid and convenient purification from many samples simultaneously. The purified DNA is suitable for PCR, cloning, automated sequencing, synthesis of labeled hybridization probes and other enzymatic reactions, and etc.

Specifications

Sample size	~10 mL
Maximum loading volume	800 μ L
Binding capacity	30 μ g
Elution volume	40~200 μ L

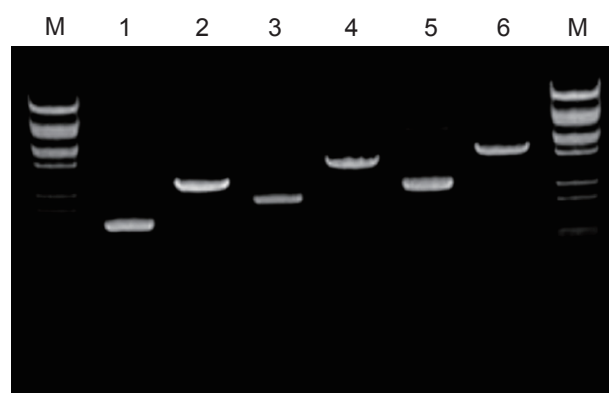
Kit Contents

Contents name	100 preps	Size 200 preps
GeneAll SV Column Type Q (with collection tube)	50 \times 1	50 \times 4
①Buffer S1	20 mL \times 1	60 mL \times 1
②Buffer S2	20 mL \times 1	60 mL \times 1
③Buffer S3	25 mL \times 1	90 mL \times 1
④Buffer AW	30 mL \times 1	110 mL \times 1
⑤Buffer PW	60 mL \times 1	250 mL \times 1
⑥Buffer EB	15 mL \times 1	30 mL \times 1
⑦RNase A solution	100 μ L \times 1	300 μ L \times 1

* Add all of ⑦RNase A Solution to ①Buffer S1 before first use.

Enzyme Digestion

Several kinds of plasmid DNA purified with Cica Geneus[®] Plasmid Prep Kit were subjected to digestion by restriction enzyme.



M : *Lambda-BatPI*

Lane 1 : pUC18

Lane 2 : pUC18, digested with *XbaI*

Lane 3 : pQE30

Lane 4 : pQE30, digested with *SmaI*

Lane 5 : pBluescript II SK (+)

Lane 6 : pBluescript II SK (+), digested with *XbaI*



Cica Geneus[®] PCR Prep Kit

Product No.	Size
08206-96	50 preps

Cica Geneus[®] PCR Prep Kit is for purification of PCR product. It can recover wide range size of DNA (100 - 10 kb) and remove small DNA (< 100 bp) such as primer and primer-dimer. The purified DNA is suitable for sequencing, cloning and etc.

Specifications

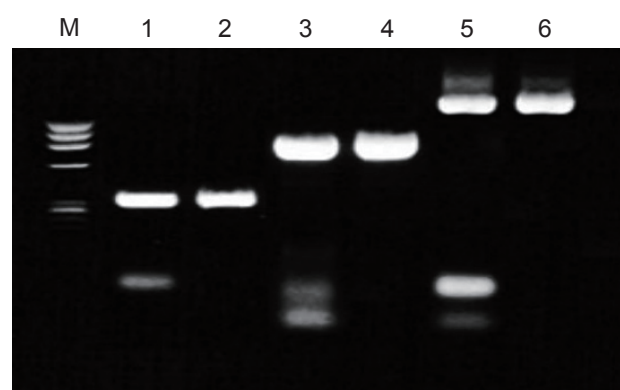
Sample volume	100 μ L
Maximum loading volume	700 μ L
Binding capacity	10 μ g
Elution volume	30~200 μ L

Kit Contents

Contents name	Size
GeneAll SV Column Type D (with collection tube)	50 \times 1
① Buffer PB	30 mL \times 1
② Buffer NW	60 mL \times 1
③ Buffer EB	15 mL \times 1

PCR products : Before and After purification

Various size of PCR products were resolved on 1.0 % agarose gel.



M : *phi*-x174-*Hae* III

Lane 1 : PCR product (312 bp) , Before purification
Lane 2 : PCR product (312 bp) , After purification
Lane 3 : PCR product (850 bp) , Before purification
Lane 4 : PCR product (850 bp) , After purification
Lane 5 : PCR product (1.6 kb) , Before purification
Lane 6 : PCR product (1.6 kb) , After purification

Protocol

Lyse

1) ① Buffer PB : 5-times to sample

Bind

Transfer the mixture to the Gene All SV Column type D

Wash

Centrifuge for 30 sec at 10,000 \times g

Transfer to a new collection tube

2) ② Buffer NW : 700 μ L

Centrifuge for 30 sec at 10,000 \times g

Transfer to a new collection tube

Elute

Place the column in a fresh 1.5 mL tube

3) ③ Buffer EB : 50 μ L
Incubate for 1 min

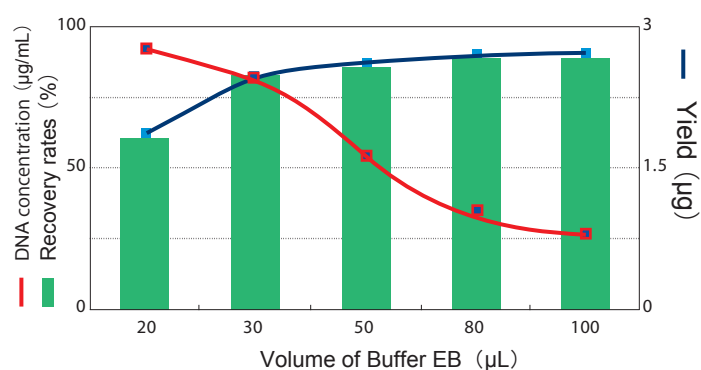
Centrifuge for 1 min sec at 10,000 \times g

DNA solution

Recovery rates (%)

Sample volume : 3 μ g

DNA size : 494 bp





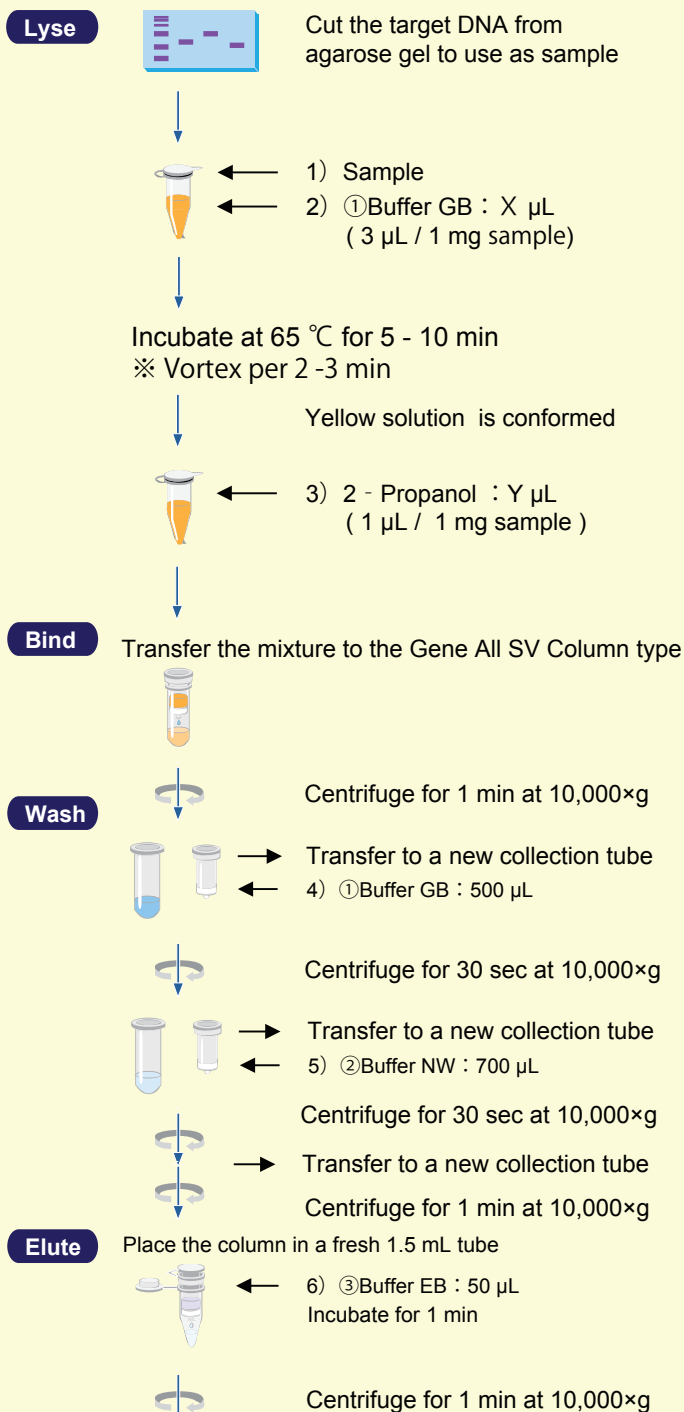
Cica Geneus[®] Gel Prep Kit

Product No.	Size
08208-96	50 preps

Related reagent

Product No.	Product Name	Size
32435-09	2-Propanol	500 mL

Protocol



DNA solution

Cica Geneus[®] Gel Prep Kit can provide easy and rapid method for purification from standard agarose gel using TAE, TBE Buffer and low-melting agarose gel.

It can purify wide range size of DNA (80 - 10 kb) from various grade agarose.

Specifications

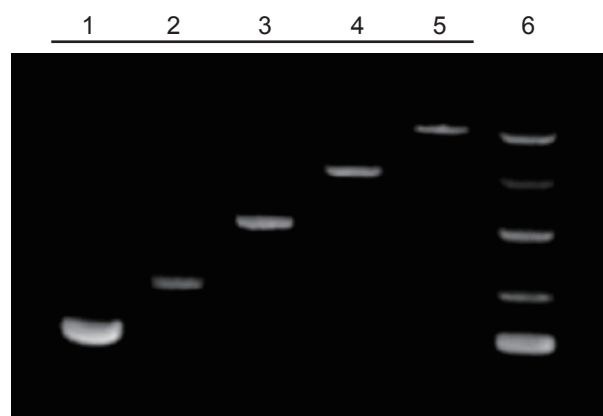
Sample volume (Agarose gel)	400 mg
Maximum loading volume	700 μ L
Binding capacity	10 μ g
Elution volume	30~200 μ L

Kit Contents

Contents name	Size
GeneAll SV Column Type D (with collection tube)	50×1
①Buffer GB	60 mL×1
②Buffer NW	60 mL×1
③Buffer EB	15 mL×1

DNA purification from agarose gel

Various size of DNA were resolved on agarose gel (TAE). Then, DNA were purified from agarose gel using Cica Geneus[®] Gel Prep Kit.



Lane 1 : DNA fragment (466 bp) , Before gel extraction / purification
Lane 2 : DNA fragment (782 bp) , Before gel extraction / purification
Lane 3 : DNA fragment (1.3 kb) , Before gel extraction / purification
Lane 4 : DNA fragment (2.3 kb) , Before gel extraction / purification
Lane 5 : DNA fragment (5.0 kb) , Before gel extraction / purification
Lane 6 : DNA fragment (466 bp, 782 bp, 1.3 kb, 2.3 kb, 5.0 kb)*

* Pooled sample from lane 1-5 after extraction / purification

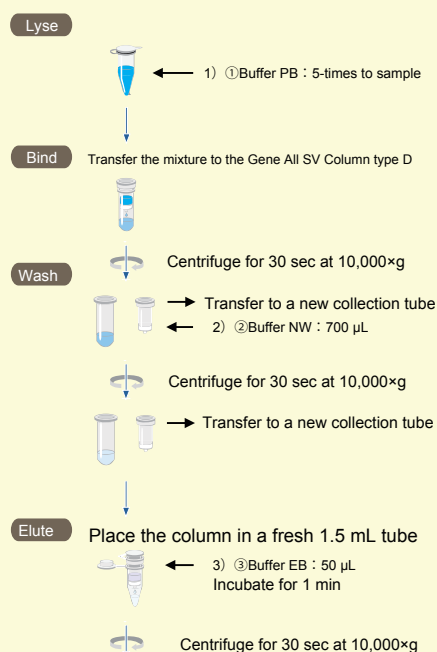


Cica Geneus[®] PCR & Gel Prep Kit

Product No.	Size
08111-96	50 preps
08111-97	200 preps

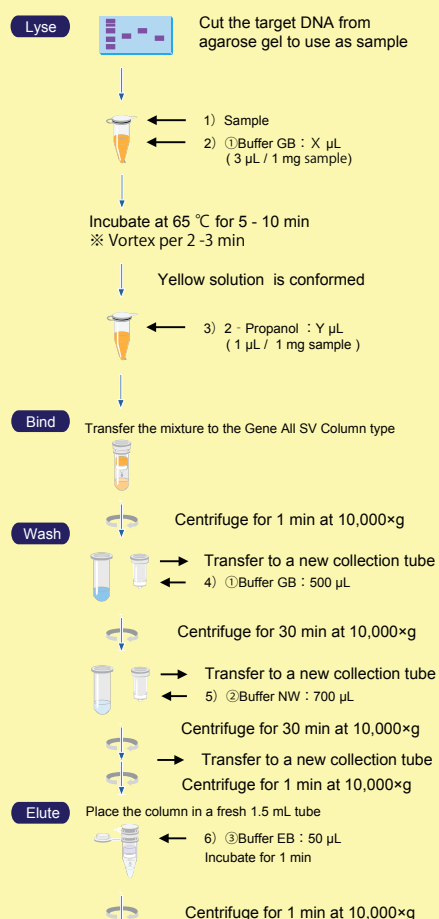
This product is a combination kit of Cica Geneus[®] PCR Prep Kit and Gel Prep Kit. You can purify PCR product by using Buffer PB and agarose gel sample by using Buffer GB.

Protocol for PCR product



DNA solution

Protocol for Agarose gel



DNA solution

Specifications

« Sample : PCR product »

Sample volume	100 μL
Maximum loading volume	700 μL
Binding capacity	10 μg
Elution volume	30~200 μL

« Sample : In agarose gel »

Sample volume (Agarose gel)	400 mg
Maximum loading volume	700 μL
Binding capacity	10 μg
Elution volume	30~200 μL

Kit Contents

Contents name	Size	
	50 preps	200 preps
GeneAll SV Column Type D (with collection tube)	50 ×1	50 ×4
① Buffer PB	30 mL×1	120 mL×1
② Buffer GB	60 mL×1	120 mL×2
③ Buffer NW	60 mL×1	250 mL×1
④ Buffer EB	15 mL×1	30 mL×1

Recovery rate from each samples (%)

Sample volume : 3 μg

Elution Buffer : Buffer EB (50 μL)

DNA Size (bp)	PCR product (%)	Agarose gel (%)
60	0	39
120	78	71
200	83	76
800	94	84
1,800	91	82
4,300	85	78
8,700	76	73



Cica Geneus[®] DNA/RNA Prep Kit (for Virus)

Product No.	Size
08215-96	50 preps

Protocol

Lyse

- 1) Sample : 300 μ L
- 2) ①Buffer VL : 500 μ L
- 3) Carrier RNA solution : 5 μ L*
*Prepare before it first use

Incubate for 10 min



Spin-down



- 4) ②Buffer RB1 : 700 μ L

Vortex for 1 min

Bind



Transfer the mixture to
the GeneAll SV Column Type V



Centrifuge for 30 sec at 10,000 \times g

Wash



Transfer to a new collection tube

- 5) ③Buffer RBW : 500 μ L



Centrifuge for 30 sec at 10,000 \times g



Transfer to a new collection tube

- 6) ④Buffer RNW : 500 μ L



Centrifuge for 30 sec at 10,000 \times g



Transfer to a new collection tube

Centrifuge for 1 min at 10,000 \times g

Elute

Place the column in a fresh 1.5 mL tube



- 7) ⑤Nuclease-free water : 30~50 μ L

Incubate for 1 min



Centrifuge for 1 min at 10,000 \times g

DNA/RNA solution

Cica Geneus[®] Total DNA/RNA Prep Kit (for Viral) provides an easy and rapid method for the isolation of total DNA such as cell-free fluid, cell-culture supernatant, plasma, serum, swab, urine and virus-infected samples.

The purified DNA/RNA is suitable for PCR, RT-PCR and etc.

Specifications

Sample volume	300 μ L
Maximum loading volume	750 μ L
Binding capacity	100 μ g
Elution volume	30~50 μ L

Kit Contents

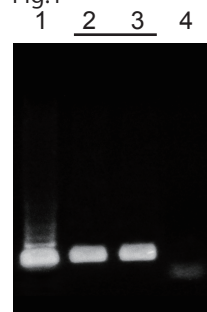
Contents name	Size
GeneAll SV Column Type V (with collection tube)	50 \times 1
Collection tube	50 \times 1
①Buffer VL	30 mL \times 1
②Buffer RB1	40 mL \times 1
③Buffer RBW	30 mL \times 1
④Buffer RNW	30 mL \times 1
⑤Nuclease-free water	15 mL \times 1
⑥Carrier RNA	270 μ g \times 1

Amplification of HSV-1 (Herpes simplex virus) DNA

Fig.1 DNA was purified from cells infected by HSV-1 and HSV-1 samples using Cica Geneus[®] DNA/RNA Prep Kit (for Virus). Purified DNA was amplified by PCR and confirmed.

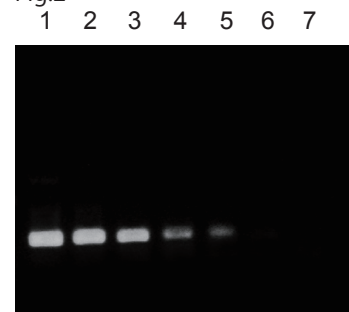
Fig.2 DNA was purified gradually diluted HSV-1 sample using Cica Geneus[®] DNA/RNA Prep Kit (for Virus). Purified DNA was amplified by PCR and confirmed.

Fig.1



Lane 1 : HSV-1 infected cell
Lane 2,3 : HSV-1 sample
Lane 4 : Negative control

Fig.2



Lane 1 : HSV-1 sample (6×10^4 pfu)
Lane 2 : HSV-1 sample (6×10^3 pfu)
Lane 3 : HSV-1 sample (6×10^2 pfu)
Lane 4 : HSV-1 sample (6×10 pfu)
Lane 5 : HSV-1 sample (6 pfu)
Lane 6 : Negative control (PCR)
Lane 7 : Negative control



Cica Geneus[®] RNA Prep Kit (for Tissue)

Product No.	Size
08057-96	50 preps

Related reagent

Product No.	Product Name	Size
25099-30	2 - Mercaptoethanol	25 g

Cica Geneus[®] RNA Prep Kit (for Tissue) provides an easy and rapid method for the isolation of total RNA such as cultured cells, whole blood cells, animal tissues.

The purified RNA is suitable for cDNA synthesis, RT-PCR and etc.

Specifications

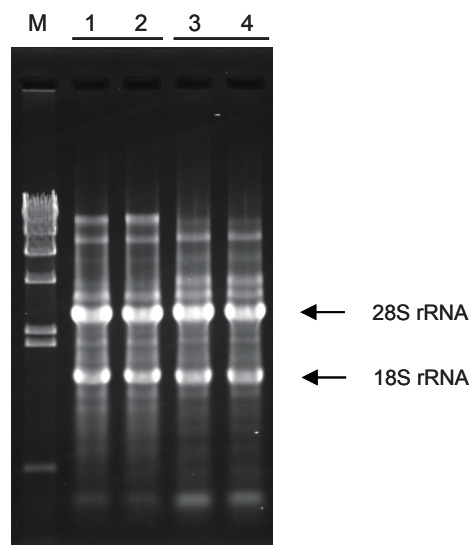
Sample size	Tissues : 25 mg Cells : 5×10 ⁶ cells
Maximum loading volume	750 µL
Binding RNA capacity	100 µg
Elution volume	40~100 µL

Kit Contents

Contents name	Size
GeneAll SV Column Type F (with collection tube)	50 ×1
1.5 mL tube	50 ×1
① Buffer LYS	30 mL×1
② Buffer GW1	35 mL×1
③ Buffer RNW	50 mL×1
④ RNase-free water	15 mL×1

RNA purification from HeLa cells

RNA purified from HeLa cells using Cica Geneus[®] RNA Prep Kit (for Tissue) and other company's products were resolved on 1.0 % agarose gel.



M : Ladder

Lane 1,2 : Cica Geneus[®] RNA Prep Kit (for Tissue)

Lane 3,4 : Competitive products

Protocol for Tissue

Lyse

- 1) Sample : 25 mg
 - 2) ① Buffer LYS : 400 µL
- Grind, homogenize
Incubate for 10 min

Bind

Transfer the mixture to the Gene All SV Column type F

Wash

Centrifuge for 30 sec at 10,000×g

- Transfer to a new collection tube
- 3) ② Buffer GW1 : 500 µL

Centrifuge for 30 sec at 10,000×g

- Transfer to a new collection tube
- 4) ③ Buffer RNW : 700 µL

Centrifuge for 30 sec at 10,000×g

Transfer to a new collection tube

Elute

Centrifuge for 1 min at 10,000×g

Place the column in a fresh 1.5 mL tube

- 5) ④ RNase-free water : 50 µL
- Incubate for 1 min

Centrifuge for 1 min at 10,000×g

RNA solution



Cica Geneus[®] RNA Prep Kit (for Plant)

Product No.	Size
08058-96	50 preps

Optional reagent

Product No.	Product Name	Size
11497-96	DNase I (For Cica Geneus [®] Prep Kit)	50 preps

Protocol for Plant tissue

Lyse

Grind fresh plant tissue (~100 mg) to a fine powder quickly and completely, using a mortar and pestle pre-cooled with liquid nitrogen

- 1) Sample
 - 2) ① Buffer RPL : 350 μ L
- Vortex
- Incubate for 3 min

Transfer the mixture to the EzSep filter

Centrifuge for 30 sec at 10,000 \times g

- 3) Transfer the mixture to new 1.5 mL tube
 - 4) Add 70% Ethanol : same volume to 3)
- Suspending (by pipette)

Bind

Transfer the mixture to the GeneAll SV Column Type W

Centrifuge for 30 sec at 10,000 \times g

Wash

- 5) ③ Buffer RBW : 500 μ L

Centrifuge for 30 sec at 10,000 \times g

Option

- 6) Diluted DNase I solution : 70 μ L

Incubate for 10 min

- 7) ③ Buffer RBW : 500 μ L
- Incubate for 2 min

Centrifuge for 30 sec at 10,000 \times g

- 8) ④ Buffer RNW : 500 μ L

Centrifuge for 30 sec at 10,000 \times g

- 9) Repeat 8) once

Elute

Place the column in a fresh 1.5 mL tube

- 10) ⑤ RNase-free water : 50 μ L

Centrifuge for 1 min at 10,000 \times g

RNA solution

Cica Geneus[®] RNA Prep Kit (for Plant) provides an easy and rapid method for the isolation of total RNA such as leaves, stems and roots. It takes only 30 minute to remove various metabolites efficiently.

The purified RNA is suitable for cDNA synthesis, RT-PCR, northern blotting and etc.

Specifications

Sample size	100 mg
Maximum loading volume	700 μ L
Binding RNA capacity	100 μ g
Elution volume	30~100 μ L

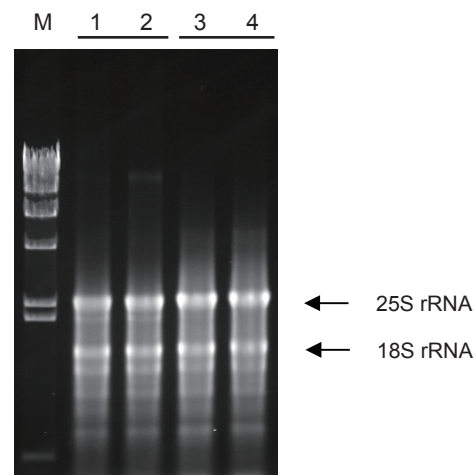
Kit Contents

Contents name	Size
GeneAll SV Column Type W (with collection tube)	50 \times 1
EzSep filter (with collection tube)	50 \times 1
1.5 mL tube	100 \times 1
① Buffer RPL	25 mL \times 1
② Buffer REL	25 mL \times 1
③ Buffer RBW	60 mL \times 1
④ Buffer RNW	60 mL \times 1
⑤ RNase-free water	15 mL \times 1
⑥ Buffer DRB	5 mL \times 1

* If you try DNase I treatment, please add DNase I (Product No. : 11497-96) to 70 μ L of ⑥ Buffer DRB before using .

RNA purification from Spinach

RNA purified from Spinash using Cica Geneus[®] RNA Prep Kit (for Plant) and other company's products were resolved on 1.0 % agarose gel.



M : Ladder

Lane 1,2 : Cica Geneus[®] RNA Prep Kit (for Plant)

Lane 3,4 : Other company's products

Related products ~Cica Geneus® Extraction Reagent Series~

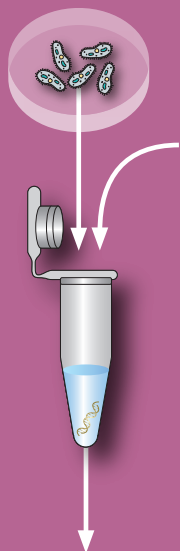
Cica Geneus® DNA Extraction Reagent
 product number 08178-96
 Standard version

Cica Geneus® DNA Extraction Reagent ST
 product number 08210-96
 Strong version

Cica Geneus® DNA Extraction Reagent AN
 product number 08199-96
 For animal version

Cica Geneus® RNA Extraction Reagent
 product number 08211-96
 For preparation of RT-PCR template

Cica Geneus® Extraction is reagent for efficient extraction of genome DNA or total RNA from cells. You can prepare PCR template in simple operation (mix reagents and target samples, Incubate)

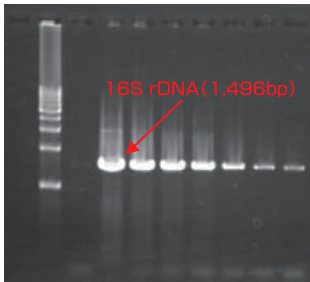


Sample 10 µL
 Reagent 100 µL
 soln. a 10 µL
 soln. b 100 µL

Incubate
 [72°C—6 minutes
 94°C—3 minutes]

Collect supernatant

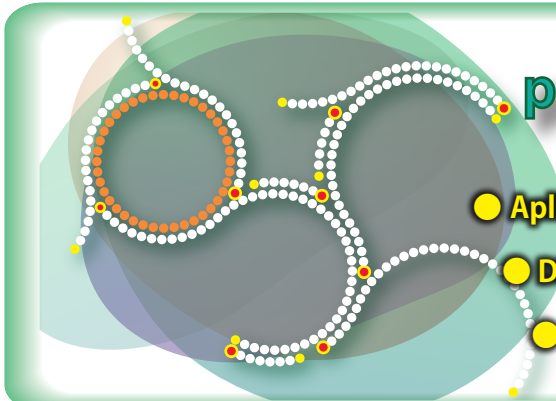
Cica Geneus® DNA Extraction Reagent
 Preparation of PCR template only 10 minutes



■ Sample	Staphylococcus aureus ATCC® 6538™	M	1 kbp ladder
■ Target gene	16S rDNA (Ribosomal DNA)	1	negative control
		2	positive control (purified DNA)
■ Culture condition	LB medium (30°C 18h)	3~8	Extracted DNA serial dilution

Product No.	Product name	Package Size
08178-96	Cica Geneus® DNA Extraction Reagent	1 Pack (120 rxn)
08210-96	Cica Geneus® DNA Extraction Reagent ST	1 Pack (120 rxn)
08199-96	Cica Geneus® DNA Extraction Reagent AN	1 Pack (120 rxn)
08211-96	Cica Geneus® RNA Extraction Reagent	1 Pack (120 rxn)

Related products ~Enzyme for DNA amplification~



phi 29 DNA Polymerase set

- Amplification of genomic DNA from as little as a single cell
- DNA removed by original purification method
- Suppressing non-specific amplification

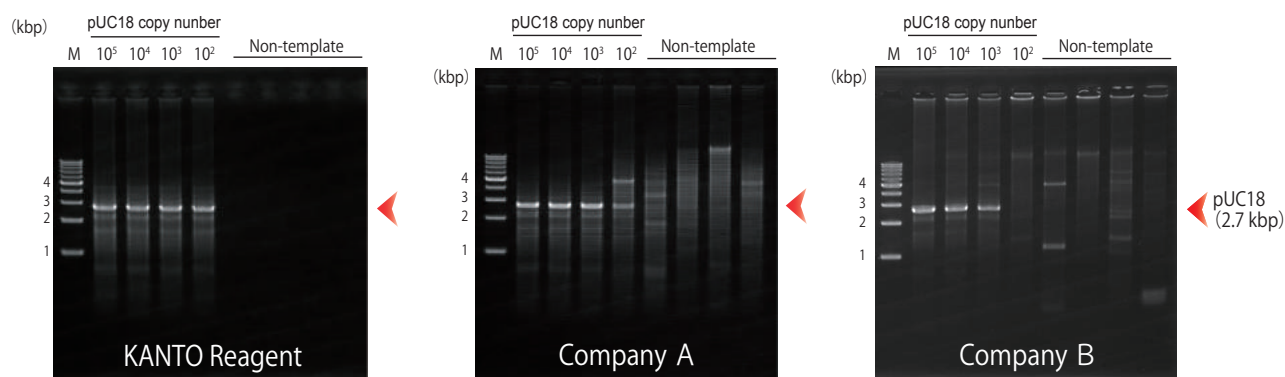
phi29 DNA Polymerase is the replicative polymerase from *Bacillus subtilis* phi29. This polymerase is available for representative amplification of the whole genome.

Features

- Mesophilic enzymes
- Exceptional strand displacement activity
- Extreme processivity
- Extreme extensibility
- An inherent 3'→5' proofreading exonuclease activity

Example: Circular DNA amplification by RCA (Rolling Circle Amplification)

pUC 18 DNA was amplified with several kinds of phi29 DNA polymerase. Then size of pUC18 DNA (2.7 kbp) were confirmed after digesting amplified DNA by restriction enzyme (BamH I and EcoR I).



● KANTO Reagent suppress non-specific amplification !

Product No.	Product name	Store at	Size
10195-96	phi29 DNA Polymerase set (0.05 mg/ mL)	-20~-25°C	1set (25 μ L \times 4)

* This product contains both phi29 DNAポリメラーゼ (0.05 mg/ mL) 25 μ L \times 4 and 10 \times Reaction Buffer 100 μ L \times 4.

* This product was built jointly by KANTO CHEMICAL CO., inc and NARO(National Agriculture and Food Research Organization).



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