

# Cica Geneus® Purification Kit Series



Kanto Reagents

**Cica Geneusa® 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 °C	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



Each buffers have a inner lid  
Rescue the contamination risk !!



We provide the most suitable columns  
depending on various samples !!



Columns for DNA are packed in the box.

Columns for RNA are packed in the blister to prevent contamination !!

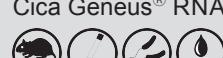
Product Name	Binding capacity	Minimum elution volume	Yield/Recovery	Operation time
Cica Geneus® DNA Prep Kit (for Blood & Tissue)	60 µg	30 µL	20~60 µg	25~220 min
Cica Geneus® Total DNA Prep Kit (for Tissue)	50 µg	30 µL	5~50 µg	25~220 min
Cica Geneus® DNA Prep Kit (for Plant)	40 µg	30 µL	4~40 µg	~40 min
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 (Tisueue)	~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		Mammallian 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	Animal tissue	Cica Geneus® DNA Prep Kit (for Blood & Tissue)
		Insect/Worm	Cultured cells	
		Mouse tail	Gram(-) bacteria	
		Animal tissue	Buffy coat	Cica Geneus® Total DNA Prep Kit (for Tissue)
	Plasmid	Cultured cell	Hair	
		Gram(+) bacteria	Body fluid	
	Fragment DNA	Gram(-) bacteria	Saliva	Cica Geneus® DNA Prep Kit (for Plant)
		Whole blood	Spem	
		Buccal swab	Mouse tail	
		Streptococcus pneumoniae		Cica Geneus® DNA Prep Kit (for Stool)
		Plant cells	Callus	
		Plant tissue	Fungi	
		Stool		Cica Geneus® DNA Prep Kit (for Stool)
	Plasmid	Escherichia coli		Cica Geneus® Plasmid Prep Kit
				
	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	Swab	Cica Geneus® DNA/RNA Prep Kit (for Virus)
		Plasma	Urine	
RNA	total RNA	Animal tissue	Bacteria	Cica Geneus® RNA Prep Kit (for Tissue)
		Cultured cells		
		Whole blood cell		
		Plant cells		Cica Geneus® RNA Prep Kit (for Plant)
		Plant tissue		

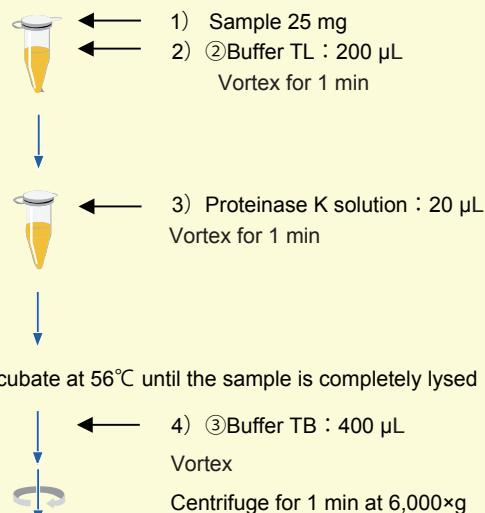


# Cica Geneus® DNA Prep Kit (for Blood & Tissue)

Product No.	Size
08197-96	100 preps

## Protocol for Animal Tissue

### Lyse

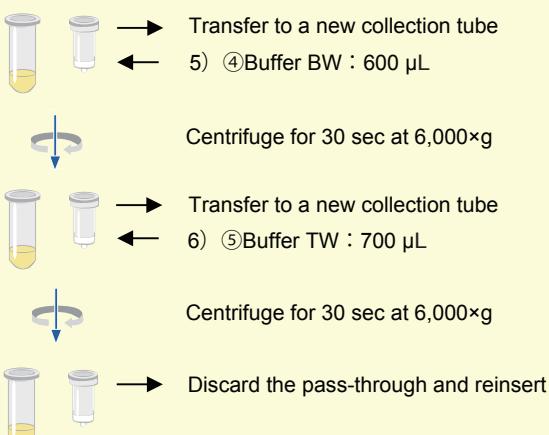


### Bind

Transfer the mixture to the Gene All SV Column type G



### Wash



### Elute

Place the column in a fresh 1.5 mL tube  
7) ⑥Buffer AE : 200  $\mu$ L  
(or sterilized water)  
Incubate for 2 min

Centrifuge for 1 min at 13,000×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

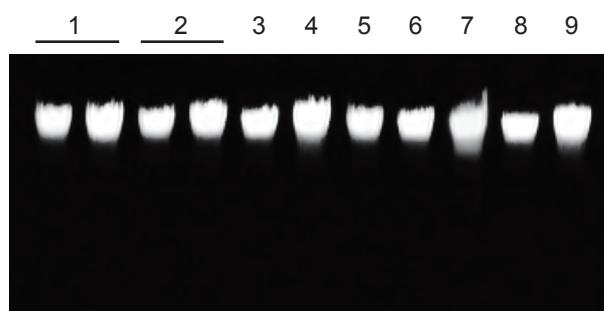
Sample size	Liquid : 300 $\mu$ L Solid : 25 mg
Maximum loading volume	750 $\mu$ L
Binding capacity	60 $\mu$ g
Elution volume	30~400 $\mu$ L

## Kit Contents

Contents name	size
GeneAll SV Column Type G (with collection tube)	50 ×2
Collection tube	100 ×2
①Buffer RL	100 mL×1
②Buffer TL	30 mL×1
③Buffer TB	50 mL×1
④Buffer BW	80 mL×1
⑤Buffer TW	100 mL×1
⑥Buffer AE	30 mL×1
⑦Proteinase K	48 mg×1
⑧Storage Buffer	4 mL×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 with100  $\mu$ L of ⑥Buffer AE. 8  $\mu$ L of luates was resolved on 0.8 % agarose gel.



Lane 1 : Liver (rat) Lane 5 : Lung (rat)  
Lane 2 : Kidney (rat) Lane 6 : Heart (rat)  
Lane 3 : Brain (rat) Lane 7 : NIH/3T3 cell  
Lane 4 : Spleen (rat) Lane 8 : Blood (bovine)  
Lane 9 : Liver (bovine)



# Cica Geneus® Total DNA Prep Kit (for Tissue)

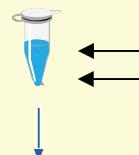
Product No.	Size
08204-96	100 preps
08204-97	250 preps

## Related reagent

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

## Protocol for Cultured Cell

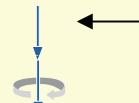
### Lyse



- 1) Proteinase K solution : 20  $\mu$ L
- 2) Sample : 200  $\mu$ L
- 3) ②Buffer BL : 200  $\mu$ L

Vortex

Incubate at 56°C until the sample is completely lysed



- 4) Ethanol : 200  $\mu$ L (not provided)

Vortex

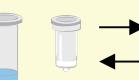
Spin down

### Bind

Transfer the mixture to the Gene All SV Column type G



Centrifuge for 1 min at 6,000 $\times$ g



- Transfer to a new collection tube
- ③Buffer BW : 600  $\mu$ L



Centrifuge for 30 sec at 6,000 $\times$ g



- Transfer to a new collection tube
- ④Buffer TW : 700  $\mu$ L



Centrifuge for 1 min at 6,000 $\times$ g



Discard the pass-through and reinsert



Centrifuge for 30 sec at full speed

Place the column in a fresh 1.5 mL tube



- ⑤Buffer AE : 200  $\mu$ L  
(or sterilized water)

Incubate for 1 min



Centrifuge for 1 min at 13,000 $\times$ g

## DNA solution

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 $\mu$ L Solid : 20 mg
Maximum loading volume	700 $\mu$ L
Binding capacity	50 $\mu$ g
Elution volume	30~400 $\mu$ L

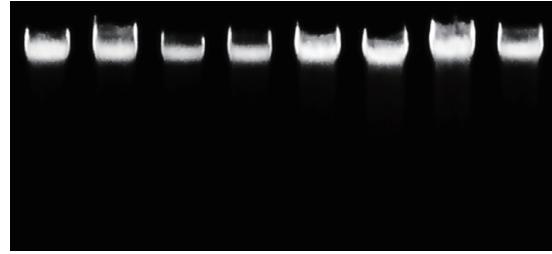
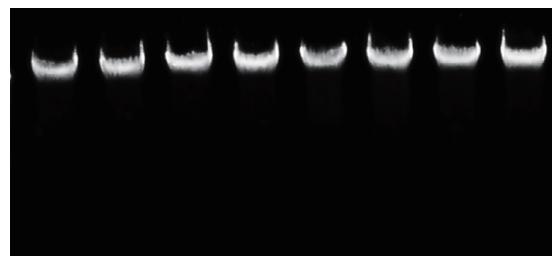
## Kit Contents

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

1 2 3 4 5 6 7 8



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



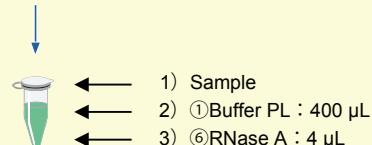
# Cica Geneus® DNA Prep Kit (for Plant)

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

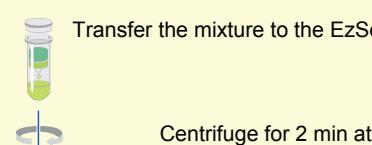


Vortex for 1 min

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



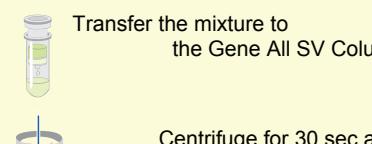
Incubate for 5 min on ice



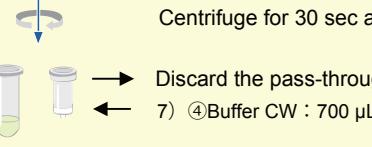
Transfer the mixture to the EzSep filter



Centrifuge for 2 min at 14,000×g



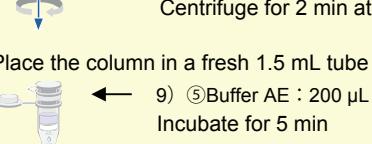
Transfer the mixture to the Gene All SV Column type G



Centrifuge for 30 sec at 10,000×g



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



Centrifuge for 30 sec at 10,000×g



Place the column in a fresh 1.5 mL tube  
9) ⑤Buffer AE : 200 μL

Incubate for 5 min



Centrifuge for 1 min at 10,000×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 minites (mini). The purified DNA is suitable for PCR, Southern blotting other enzymatic reactions, and etc.

## Specifications

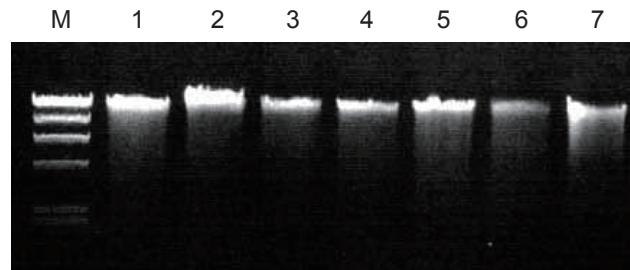
Sample size	Wet : 100 mg Dry : 25 mg
Maximum loading volume	750 μL
Binding capacity	40 μg
Elution volume	30~400 μL

## Kit Contents

Contents name	Size
GeneAll SV Column Type G (with collection tube)	50×2
EzSep filter (with collection tube)	50×2
①Buffer PL	100 mL×1
②Buffer PD	30 mL×1
③Buffer BD	110 mL×1
④Buffer CW	150 mL×1
⑤Buffer AE	60 mL×1
⑥RNase A (100 mg/ml)	480 μL×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 μL of ⑤Buffer AE. 5 μL of luates was resolved on 0.8 % agarose gel.



M : Ladder

Lane 1 : Pine

Lane 5 : Cayenne

Lane 2 : Tabacco

Lane 6 : Arabidopsis

Lane 3 : Barely

Lane 7 : Potato

Lane 4 : Cycad

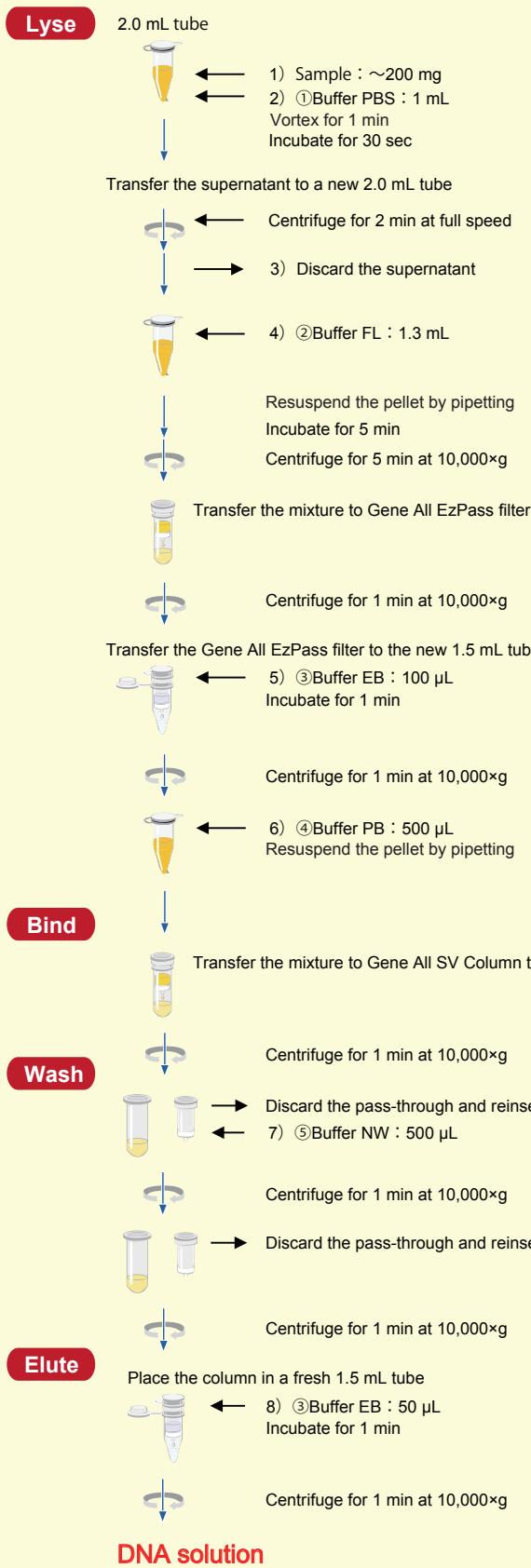


# Cica Geneus® DNA Prep Kit (for Stool)

Product No.	Size
08203-96	50 preps

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.

## Protocol for Stool



## Specifications

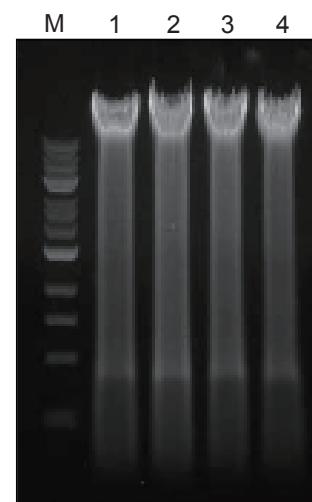
Sample size	200 mg (Stool)
Maximum loading volume	700 μL
Binding capacity	100 μg
Elution volume	30~200 μL

## 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 luates was resolved on 1.0 % agarose gel.



Lane 1-4 : Chicken stool

M : 1kb Ladder

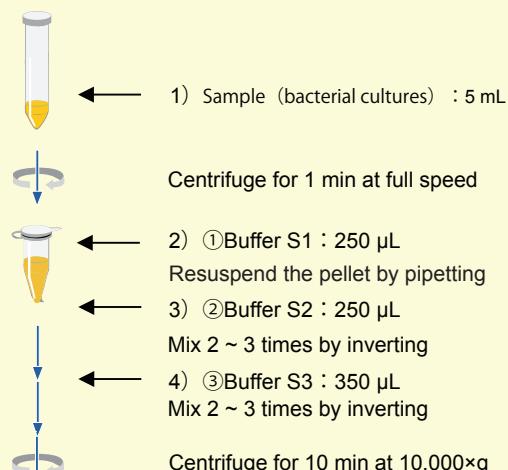


# Cica Geneus® Plasmid Prep Kit

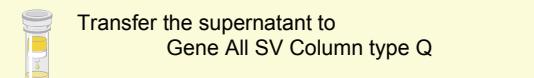
Product No.	Size
08207-96	50 preps
08207-97	200 preps

## Protocol

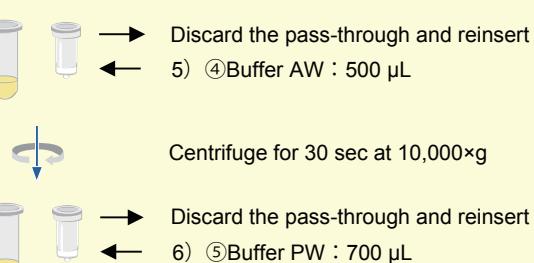
### Lyse



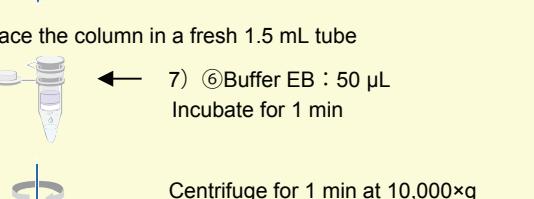
### Bind



### Wash



### Elute



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 μL
Binding capacity	30 μg
Elution volume	40~200 μL

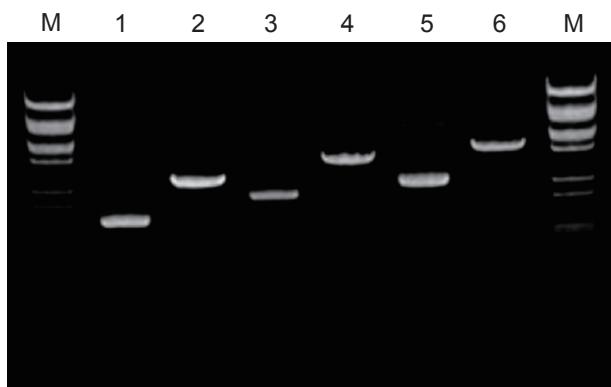
## Kit Contents

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

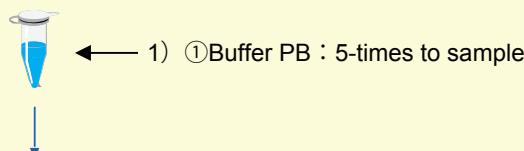


# Cica Geneus® PCR Prep Kit

Product No.	Size
08206-96	50 preps

## Protocol

### Lyse



### Bind

Transfer the mixture to the Gene All SV Column type D



Centrifuge for 30 sec at 10,000×g



Transfer to a new collection tube  
2) ②Buffer NW : 700 µL



Centrifuge for 30 sec at 10,000×g



Transfer to a new collection tube

### Elute

Place the column in a fresh 1.5 mL tube



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



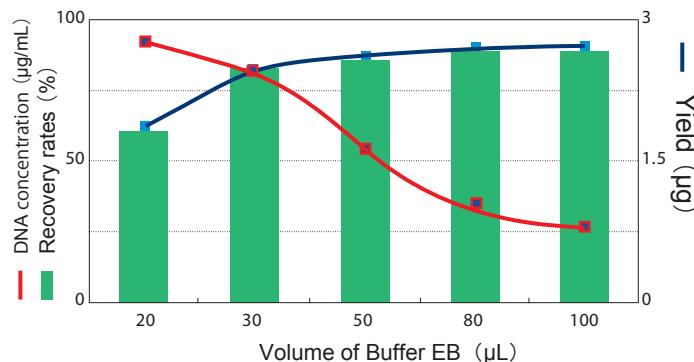
Centrifuge for 1 min sec at 10,000×g

**DNA solution**

## Recovery rates (%)

Sample volume : 3 µg

DNA size : 494 bp



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

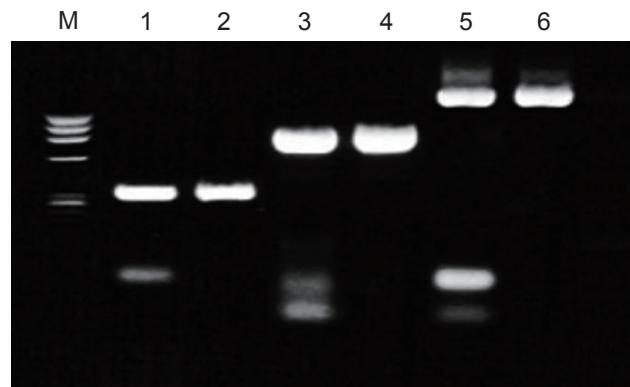
Sample volume	100 µL
Maximum loading volume	700 µL
Binding capacity	10 µg
Elution volume	30~200 µL

## Kit Contents

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

## PCR products : Before and After purification

Values 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 kp ) , Before purification
- Lane 6 : PCR product ( 1.6 kp ) , After purification



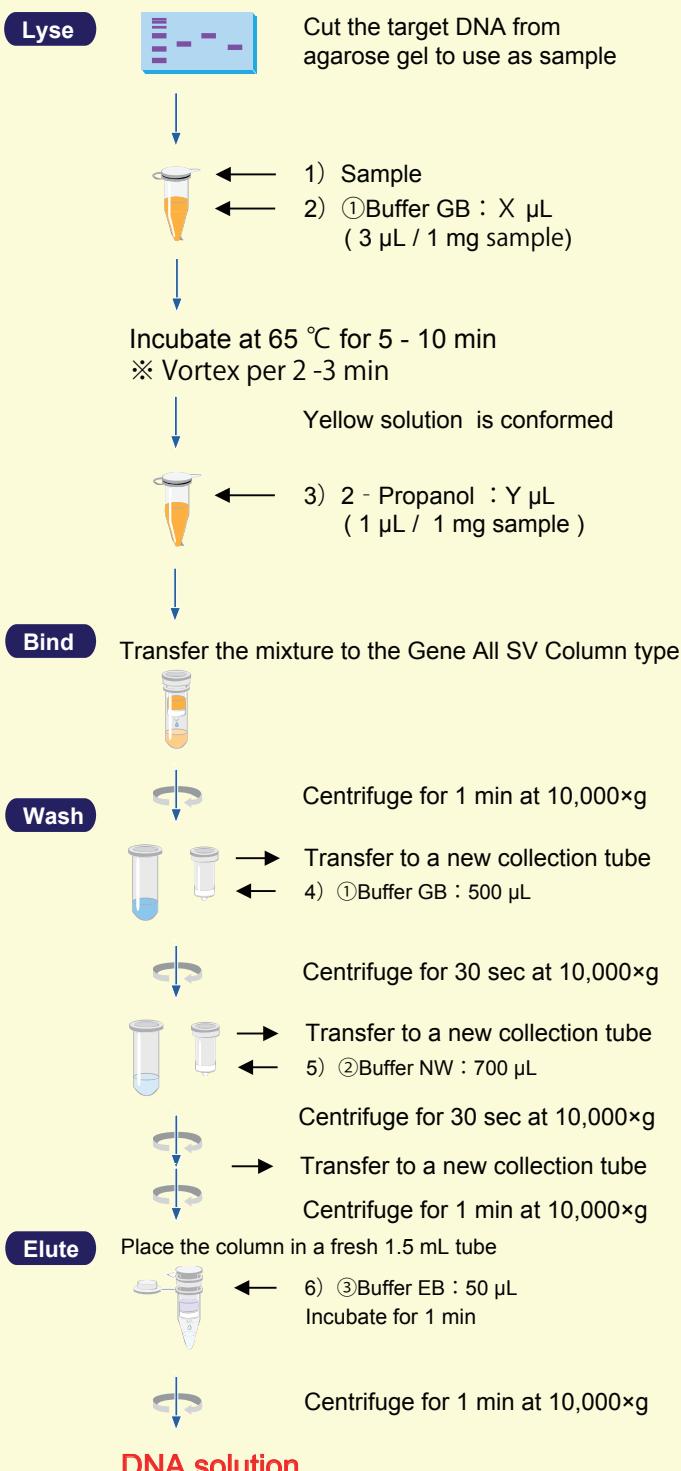
# Cica Geneus® Gel Prep Kit

Product No.	Size
08208-96	50 preps

## Related reagent

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

## Protocol



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

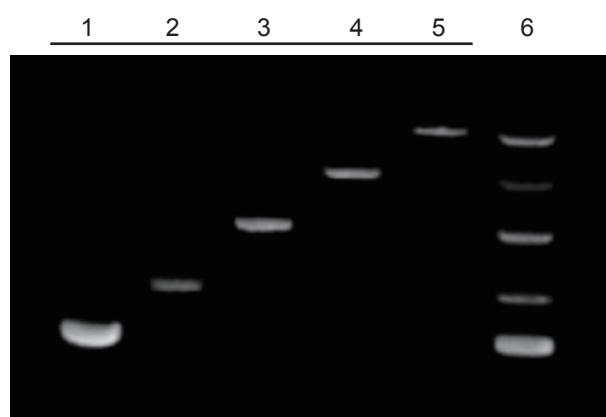
Sample volume (Agarose gel)	400 mg
Maximum loading volume	700 $\mu$ L
Binding capacity	10 $\mu$ g
Elution volume	30~200 $\mu$ L

## 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

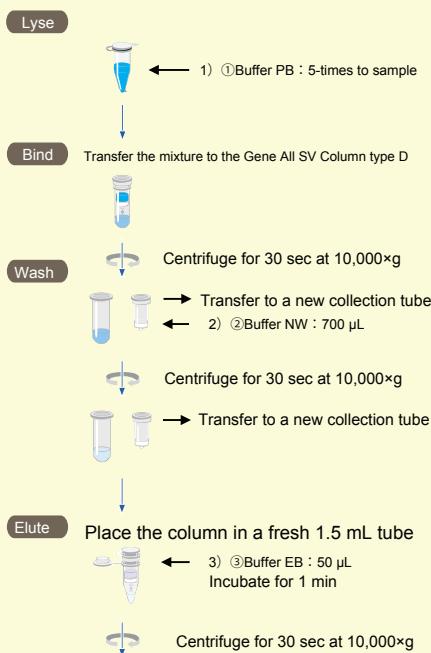


# Cica Geneus® PCR & Gel Prep Kit

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

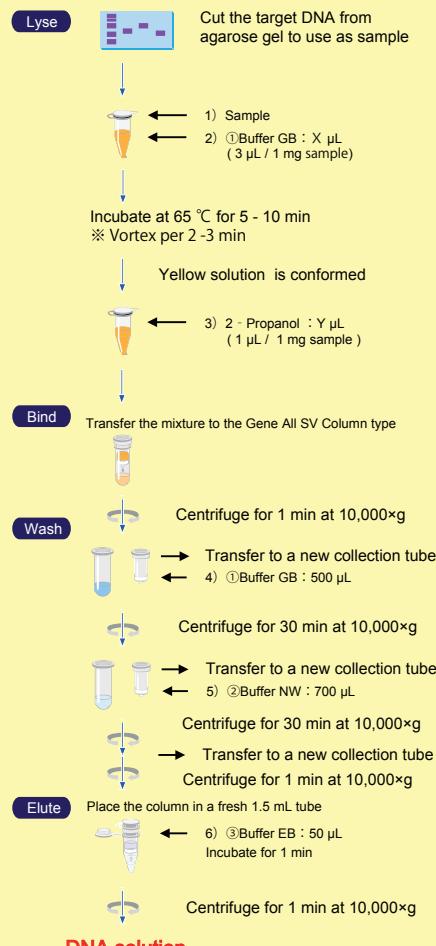
This product is a combination kit of Cica Geneus® PCR Prep Kit and Gel Prep Kit. You can purify PCR product by using Buffer PB and agarose gel sample by using Buffer GB.

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

## Recovery rate from each samples (%)

Sample volume : 3 μg

Elution Buffer : Buffer EB (50 μL)

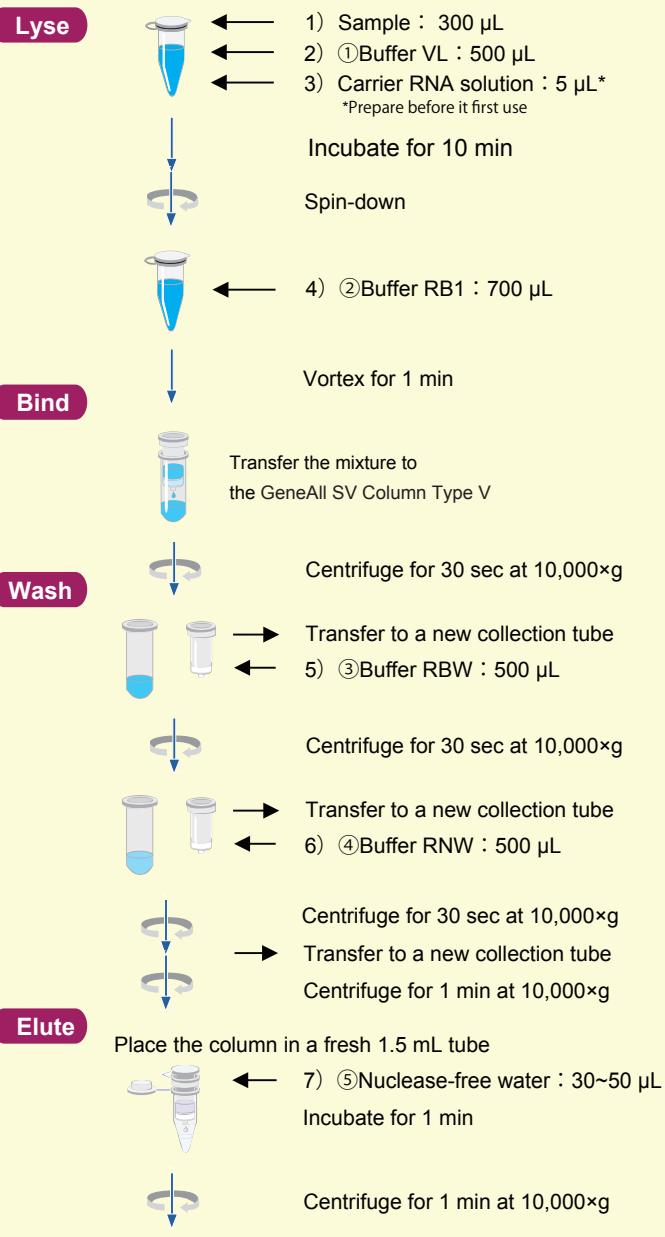
DNA Size (bp)	PCR product (%)	Agarose gel (%)
60	0	39
120	78	71
200	83	76
800	94	84
1,800	91	82
4,300	85	78
8,700	76	73



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

Product No.	Size
08215-96	50 preps

## Protocol



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 μL
Maximum loading volume	750 μL
Binding capacity	100 μg
Elution volume	30~50 μL

## Kit Contents

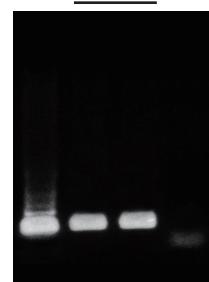
Contents name	Size
GeneAll SV Column Type V (with collection tube)	50 ×1
Collection tube	50 ×1
①Buffer VL	30 mL×1
②Buffer RB1	40 mL×1
③Buffer RBW	30 mL×1
④Buffer RNW	30 mL×1
⑤Nuclease-free water	15 mL×1
⑥Carrier RNA	270 μg×1

## 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  
1 2 3 4



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

Fig.2  
1 2 3 4 5 6 7



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



# Cica Geneus® RNA Prep Kit (for Tissue)

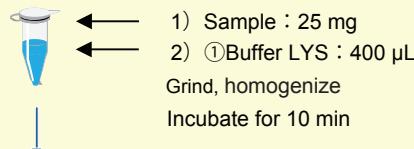
Product No.	Size
08057-96	50 preps

## Related reagent

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

## Protocol for Tissue

### Lyse

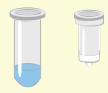


### Bind

Transfer the mixture to the Gene All SV Column type F



Centrifuge for 30 sec at 10,000×g



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



Centrifuge for 30 sec at 10,000×g



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



Centrifuge for 30 sec at 10,000×g



Transfer to a new collection tube



Centrifuge for 1 min at 10,000×g

### Elute

Place the column in a fresh 1.5 mL tube



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



Centrifuge for 1 min at 10,000×g

## RNA solution

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

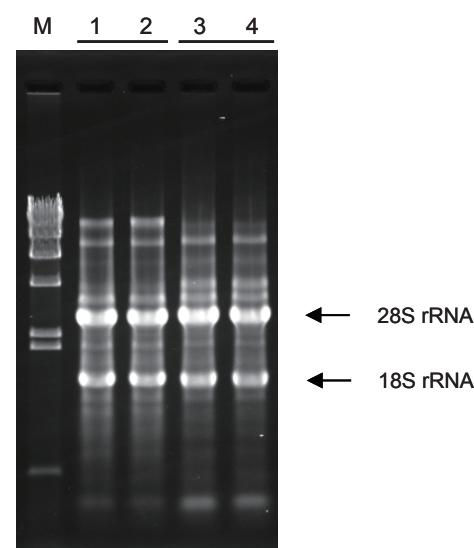
Sample size	Tissues : 25 mg Cells : 5×10 <sup>6</sup> cells
Maximum loading volume	750 μL
Binding RNA capacity	100 μg
Elution volume	40~100 μL

## Kit Contents

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



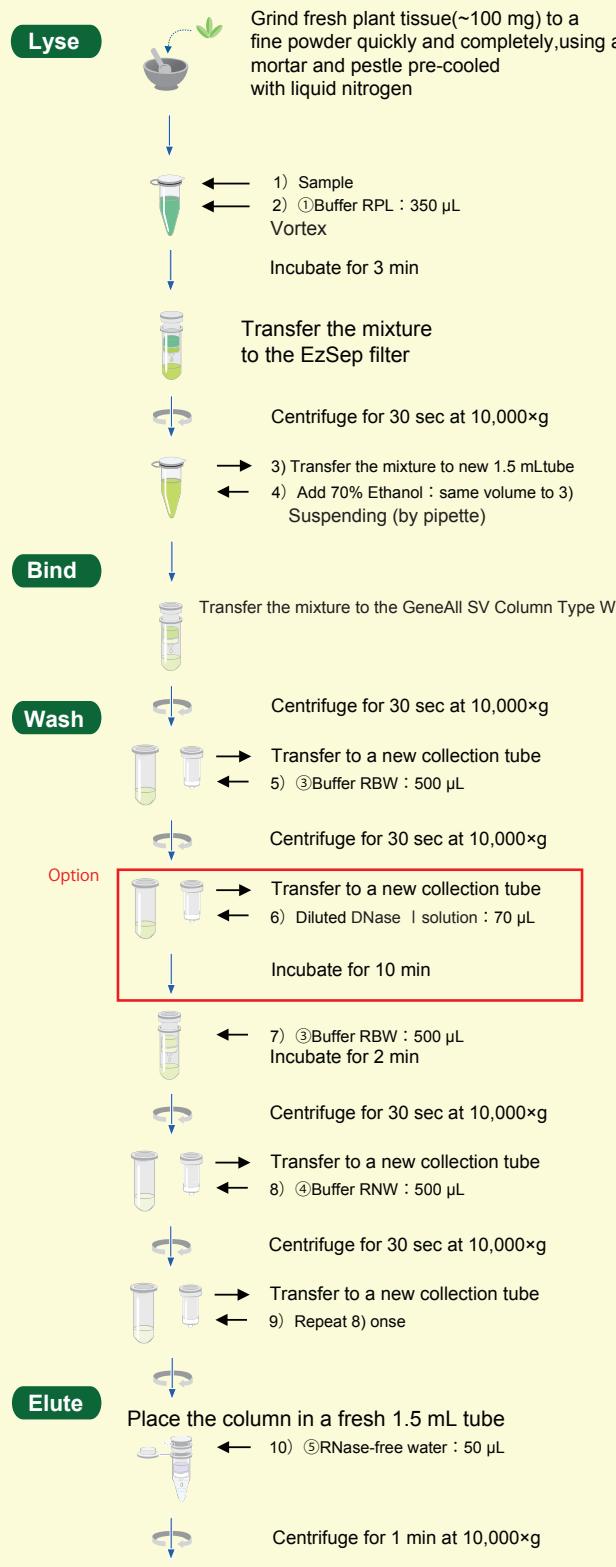
# Cica Geneus® RNA Prep Kit (for Plant)

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



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 µL
Binding RNA capacity	100 µg
Elution volume	30~100 µL

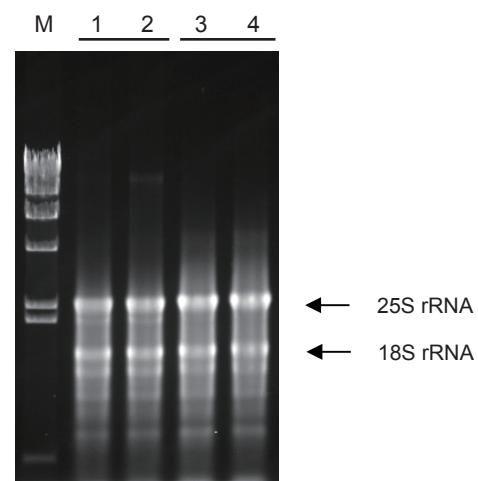
## Kit Contents

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

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

## RNA purification from Spinach

RNA purified from Spinach 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

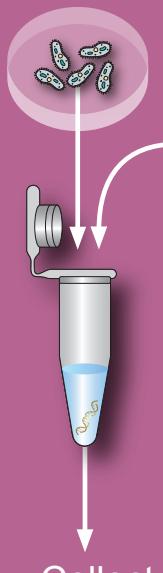
For animal version

## 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)

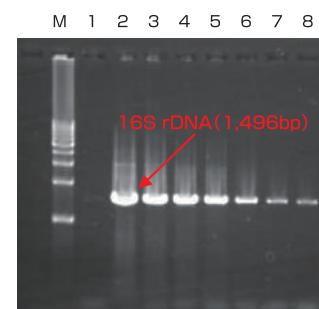


Sample 10 µL  
Reagent 100 µL  
[soln. a 10 µL  
soln. b 100 µL]

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™  
■ Target gene  
16S rDNA (Ribosomal DNA)  
■ Culture condition  
LB medium (30°C 18h)

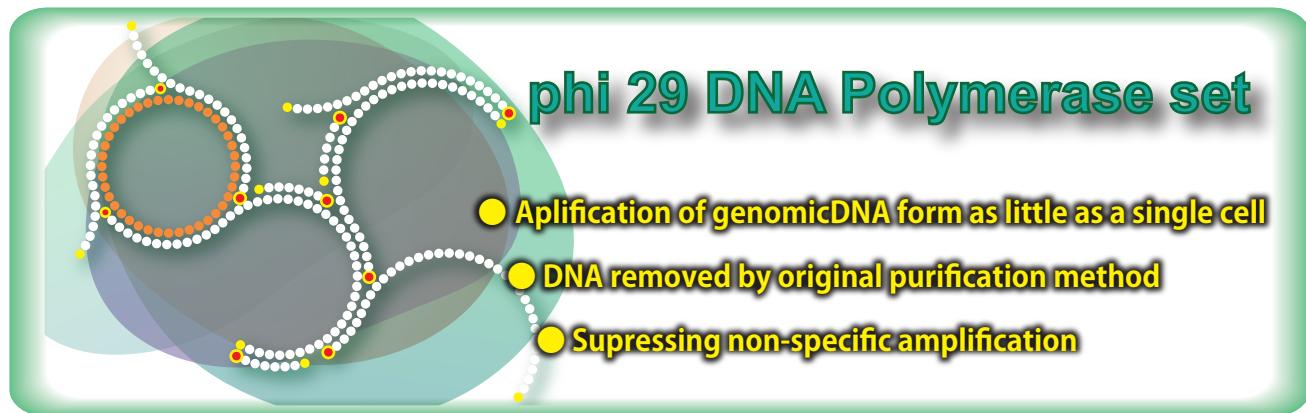
M 1 2 3 4 5 6 7 8

16S rDNA(1,496bp)

1 kbp ladder  
negative control  
positive control  
(purified DNA)  
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~



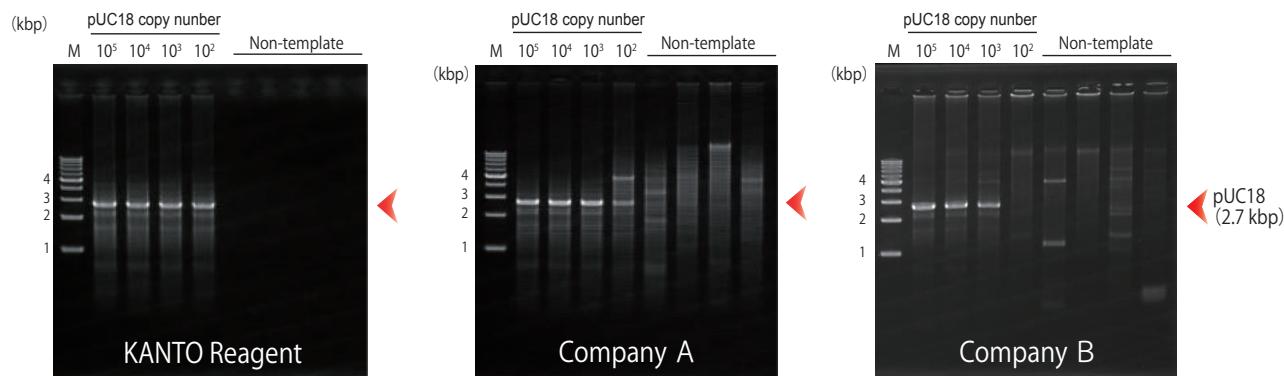
phi29 DNA Polymerase is the replicative polymerase from *Bacillus subtilis* phi29. This polymerase is available for representative amplification of the whole genome.

## Features

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

### 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 μL × 4)

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

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



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