



MagCore®
Automated Nucleic Acid
Extractor

Advantage

Touch Button - simplicity

Rapid Results - about 30 minutes

Flexible Design - single sample can be run without wasting

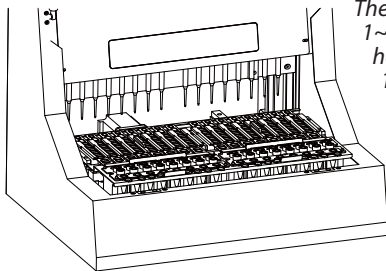
Batch Purify - 16 samples at one time

Diverse Purification – Whole blood, plant, bacteria, tissue, Culture cells, viral DNA

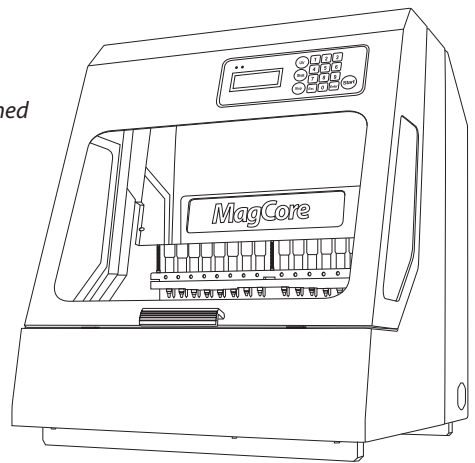
Economical Pricing - reagents and instrument

MagCore® System is a simple, fast and cost-effective technique to automatically purify nucleic acids from a diverse range of sample sources. With the pre-programmed protocols and magnetic bead based reagent cartridges the system provides consistent and stable nucleic acid purification for every busy laboratory.

The MagCore® is bench top instrument for efficient and cross contamination free isolation of various DNA/RNA samples, with a built-in UV lamp, the instrument can be easily decontaminated after operations.



The instrument equipped 1~16 nozzle pipette head to handle flexible 1-16 samples per run. Reagents are prefilled into disposable cartridge with a capacity of 8 samples to Cartridge Rack. All subsequent steps are automatically performed by pre-programmed software, users simply choose desired sample types, operation volume and elution volume then press "START" to run entire procedures.



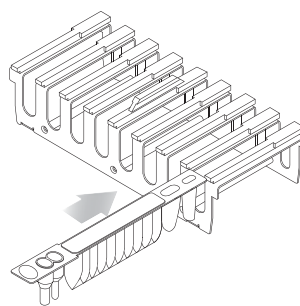
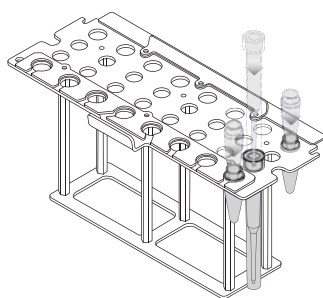


MagCore® Extractor System

Easy To Use

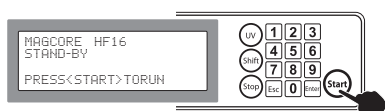
Simple 1 ► 2 ► 3 Steps

1



Install accessories and apply your specimen to MagCore®

2



Input Cartridge Code to run protocol

3



30min~45min to complete !

Processing Capacity

High processing capacity to handle up to 16 samples synchronized.

To Avoid Cross Contamination

Independent Channel

Pipetting system and disposable accessories for each independent channel provide cross-contamination free to MagCore®. Much higher processing capacity to handle up to 16 samples synchronized.

UV Sterilization

UV button is designed to turn on UV Lamp while your MagCore® needs to be sterilized after running contagious samples.

Excellent Accessories Design

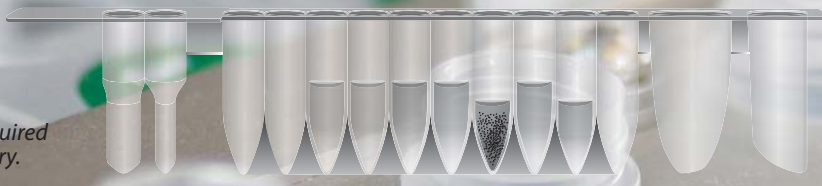
Cartridge Design

MagCore® reagent cartridges are pre-sealed incorporating all reagents needed for the purification process. No additional reagents are required and no handling is necessary.

Pre-filled and sealed buffer cartridge and automated piercing step, it eliminates possible contaminations or buffer spout.

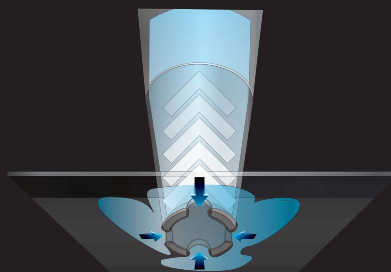
Patented Heating Well and Separation Well in the cartridge provide strong circulate force for Binding/Washing steps and give high purity in final eluent.

The MagCore® beads are pre-allocated into each cartridge in Well 4. Mixing of the beads, reagents and sample is achieved by the liquid handling action of the instrument. Separation is achieved by magnetic attraction and liquid handling.



Tip Design

The unique design of Tip-end with cross notch, provides precise buffer volume at pipetting steps, and without dead volume.

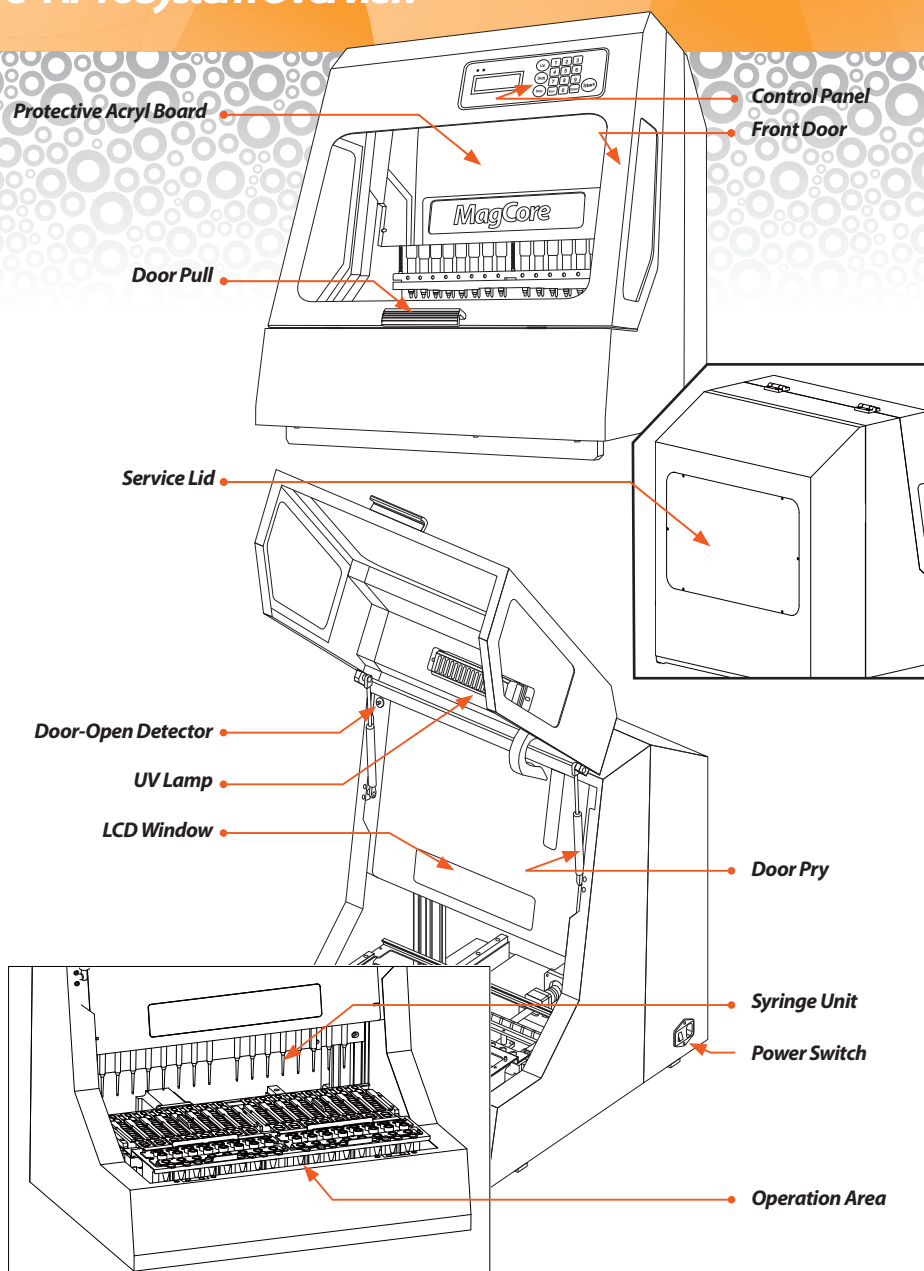


Built-in Programs

With pre-programmed protocols built-in, MagCore® is available for a diverse range of specimen. All programs are controlled by a different 3-digital protocol code, simply key-in the code to run desired protocol.

MagCoreR is equipped with RS232 port and simply download from RBC website for free software upgrade.

MagCore® HF16 System Overview



RBC Bioscience already obtained the CE, FC and IVD certificate for automatic Nucleic acid extractor – MagCore® HF8.

MagCore® HF16 Specification And Accessories

Specification

Model	HF16
System Method	Cellulose coated magnetic beads
System Components	<ol style="list-style-type: none"> 1. Pipetting Unit: Dispensing, transferring, X-Y two axis movements. 2. Electric Control: Internal microprocessor. 3. UV Light: Power 5W, life duration >1,000 Hrs. 4. Heating Block: RT~80°C. 5. Display Screen: 3 inches LCM screen with key press panel 6. Accessories: T- Rack, Cartridge Rack , Empty Cartridges, Tip/Holders, Sample tube , Microcentrifugr Tube, Syringe O-ring and Grease.
Power Supply	Voltage: AC 100-240V; Frequency: 50/60Hz; Power Consumption >1.0KVA
Dimension	W550 X D660 X H680 (mm) W21.65 X D25.98 X H26.77 (inches)
Net Weight	70kg / 155lbs

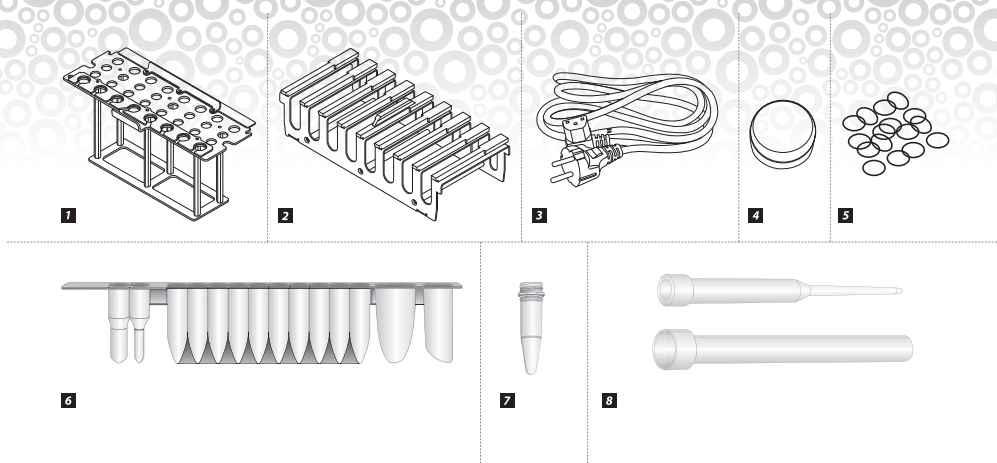
Operating Parameters

Processing Capacity	1~16 samples per batch
Processing Time	30-70 minutes (depends on sample type and method)
Sample Volume	200 µl /400 µl /1,200 µl / 2,400 µl in require
Elution Volume	60 µl /100 µl /150 µl /200 µl
Yield	Average 6µg Genomic DNA from 200µl human whole blood
Purity	O.D. 1.8-2.0 A ₂₆₀ /A ₂₈₀ ratio

Operating Environment

Temperatures allowed during transportation storage packaging	15°C~35°C
Temperatures allowed during operation	+18°C to +30°C
Pollution Degree	Indoor

Accessories

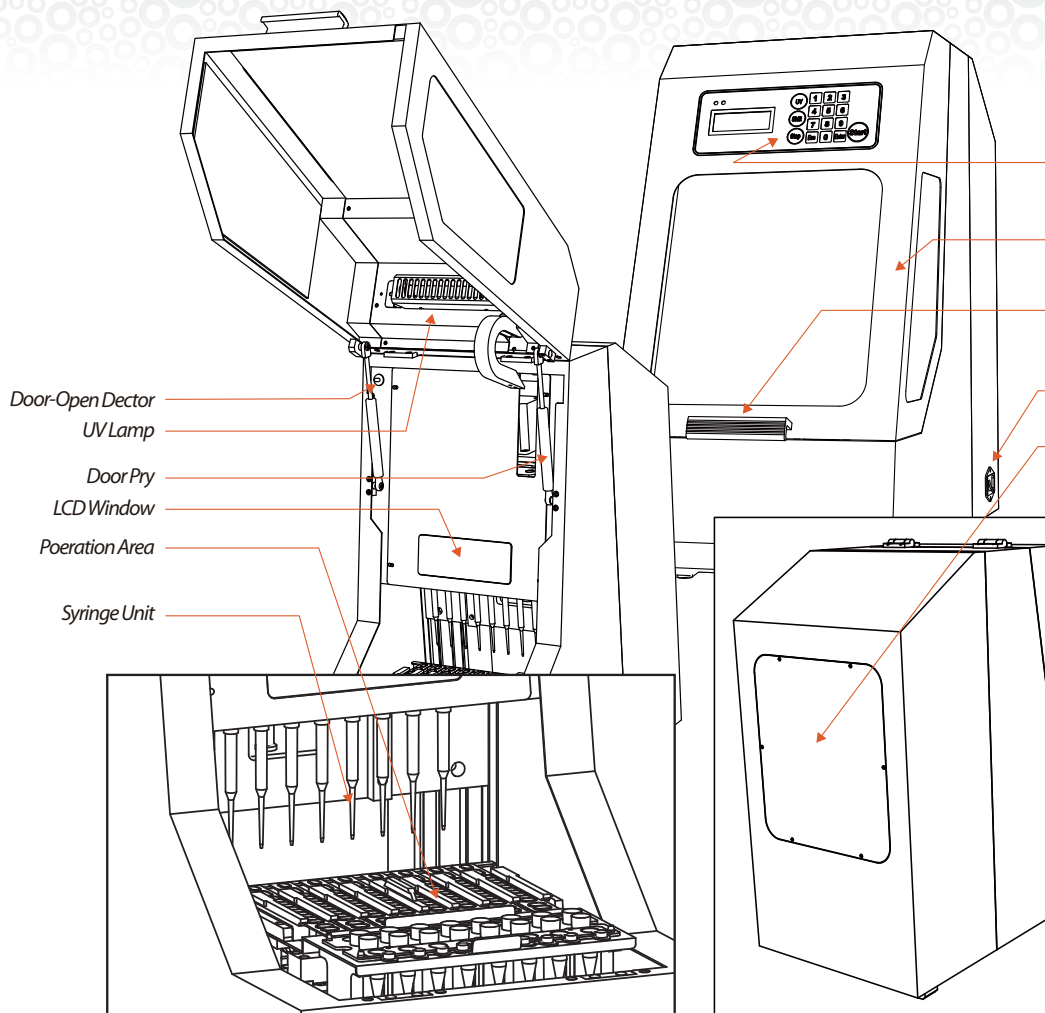


Parts :

1 T-Rack 2 Cartridge Rack 3 Power Cable 4 Lubricating silicon grease 5 O-Rings 6 Cartridge 7 Sample/Elution Tube 8 Tip/Tip Holder

Accessory No: 6, 7, 8 are installation tools, please keep clean for permanent use.

MagCore® Compact System Overview



RBC Bioscience already obtained the CE, FC and IVD certificate for automatic Nucleic acid extractor – MagCore® HF 8.

MagCore® Compact Specification And Accessories

Specification

Model	Compact
System Method	Cellulose coated magnetic beads
System Components	<ol style="list-style-type: none"> 1. Pipetting Unit: Dispensing, transferring, X-Y two axis movements. 2. Electric Control: Internal microprocessor. 3. UV Light: Power 5W, life duration >1,000 Hrs. 4. Heating Block: RT~80°C. 5. Display Screen: 3 inches LCM screen with key press panel 6. Accessories: T- Rack, Cartridge Rack, Empty Cartridges, Tip/Holders, Sample tube, Microcentrifugr Tube, Syringe O-ring and Grease.
Power Supply	Voltage: AC 100-240V; Frequency: 50/60Hz; Power Consumption >1.0KVA
Dimension	W350 X D660 X H680 (mm) W13.79 X D25.98 X H26.77 (inches)
Net Weight	50kg /110lbs

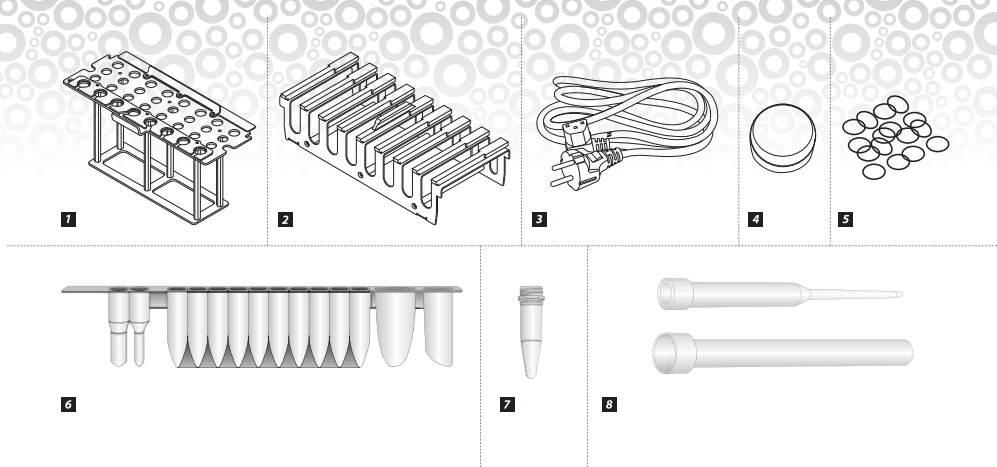
Operating Parameters

Processing Capacity	1~8 samples per batch
Processing Time	30-70 minutes (depends on sample type and method)
Sample Volume	200 µl /400 µl /1,200 µl /2,400 µl in require
Elution Volume	60µl/100µl/150µl/200 µl
Yield	Average 6µg Genomic DNA from 200µl human whole blood
Purity	O.D. 1.8-2.0 A ₂₆₀ /A ₂₈₀ ratio

Operating Environment

Temperatures allowed during transportation storage packaging	15°C~35°C
Temperatures allowed during operation	+18°C to +30°C
Pollution Degree	Indoor

Accessories



Parts :

1 T-Rack 2 Cartridge Rack 3 Power Cable 4 Lubricating silicon grease 5 O-Rings 6 Cartridge 7 Sample/Elution Tube 8 Tip/Tip Holder

Accessory No: 6, 7, 8 are installation tools, please keep clean for permanent use.

For Extracting Genomic DNA from human whole blood

MagCore® Genomic DNA Whole Blood Kit

MagCore® Genomic DNA Whole Blood Kit is designed for purification of total DNA (including genomic, mitochondrial and viral DNA) from whole blood, plasma, serum, buffy coat by using automated instrument of MagCore HF16. The method uses pre-filled cartridge contains proteinase K and a chaotropic salt, guanidine hydrochloride to lysis cells and degrade protein. DNA in chaotropic salt binds to cellulose coated magnetic beads. After washing off the contaminants, the purified DNA is eluted by low salt elution buffer or water. Purified DNA of approximately 20-30 kb in length is suitable for PCR or other enzymatic reactions.

Cartridge Code 101



Cat.No. MGB400-01

MagCore® Genomic DNA Whole Blood Kit (Speedy installation)

Pre-filled Cartridge Reagent: 36 pcs.
(With PK Add-in)
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
(Shelf Life 6 months)

Cat.No. MGB400-02

MagCore® Genomic DNA Whole Blood Kit (Speedy installation)

Pre-filled Cartridge Reagent: 96 pcs.
(With PK Add-in)
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
(Shelf Life 6 months)

Cartridge Code 102



Cat.No. MGB400-03

MagCore® Genomic DNA Whole Blood Kit

Pre-filled Cartridge Reagent: 36 pcs.
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
Proteinase K (11mg): 2 pcs.
PK Storage Buffer: 2 pcs.
(Shelf Life 12 months)

Cat.No. MGB400-04

MagCore® Genomic DNA Whole Blood Kit

Pre-filled Cartridge Reagent: 96 pcs.
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
Proteinase K (11mg): 2 pcs.
PK Storage Buffer: 2 pcs.
(Shelf Life 12 months)

Features

Quick, Simple Extraction

MagCoreR – Genomic Whole blood DNA– is based on the principle that cellulose coated magnetic beads bind genomic DNA, enabling quick simple extraction

Provides high purity genomic DNA

The genomic DNA extracted with this kit rarely contains impurities such as RNA and proteins, allowing for direct use in enzymatic reactions such as PCR or real time PCR.

No Phenol or Chloroform Extraction

This Kit does not need to use of harmful phenol or chloroform so there is no hazardous waste problem.

Applications

For general laboratory use. Using magnetic-particle technology to purified genomic DNA from fresh whole blood. The purified genomic DNA can be directly used for downstream applications like quantitative PCR, restriction enzyme digestion, southern blotting.

Performance

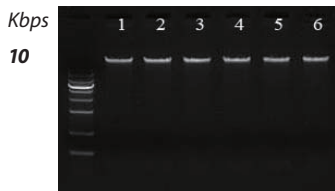
Different anticoagulant testing

DNA quality detection by Spectrophotometer

Anticoagulant	A _{260/280}	Conc.(ng/µl)
1. EDTA	1.87	33.01
2. Sodium Citrate	1.87	28.73
3. Lithium Heparin(4ml)	1.95	35.34
4. Sodium Fluoride	1.91	37.72
5. Lithium Heparin(9ml)	1.95	33.78

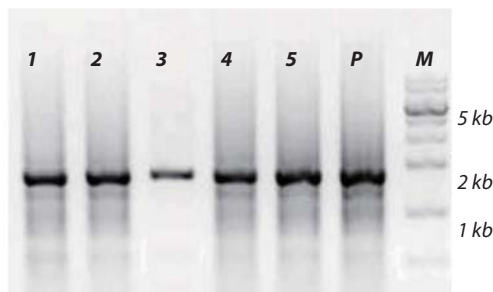
Agarose gel electrophoresis

Lane M, RBC 1kb DNA Ladder Marker Cat. RD002 Lane 1~6, Whole blood genomic DNA purification, all samples prepared at the same time.



Agarose gel electrophoresis

Lane M, RBC 1kb DNA Ladder Marker Cat. RD001 Lane 1~5, PCR check inhibition with different anticoagulant; target gene Cbl-b gene 1.7 Kb Lane P: Positive control.



Flexibility in sample source volumes

Protocols for 200 and 400 µl extraction with same cartridge

MagCore® beads have superior binding capacity allowing the flexibility to choose between standard 200µl sample source extractions or 400µl to maximize yields from whole blood or buffy coat.

For Extraction Genomic DNA from human whole blood **NEW**

MagCore® Genomic DNA Large Volume Whole Blood Kit (1.2ml)

MagCore® Genomic DNA Large Volume Whole Blood kit is designed to extract genomic DNA from 1.2ml fresh whole blood via MagCore® HF16. The kit contains all required reagent and labware for automated purification using magnetic-particle technology. Reagents are supplied in prefilled cartridges, which can be loaded into machine directly without extra work. Program code number 104 in combine using MagCore® Genomic DNA Large Volume Whole Blood Kit can perform high quality genomic DNA.



Cartridge Code 104

Cat.No. MGB1200

MagCore® Genomic DNA Large Volume Whole Blood Kit

Pre-filled Cartridge Reagent: 96 pcs.

Pipet Tip: 100 pcs.

Tip Holder: 100 pcs.

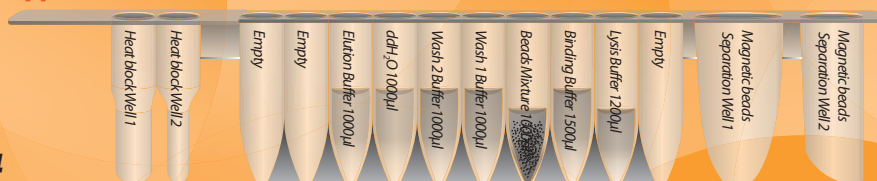
Sample Tube: 100 pcs.

Elution (Eppendorf) Tube: 100 pcs.

Proteinase K (11mg): 8 pcs.

PK Storage Buffer (1.25ml): 8 pcs.

Applications



Storage and Stability

(1) The kit should be stored at room temperature.

(2) Proteinase K should be stored at -20°C when mixing with PK Storage Buffer.

Applications

For general laboratory use. Using magnetic-particle technology to purified genomic DNA from fresh whole blood. The purified genomic DNA can be directly used for downstream applications like quantitative PCR, restriction enzyme digestion, southern blotting.

Advantage

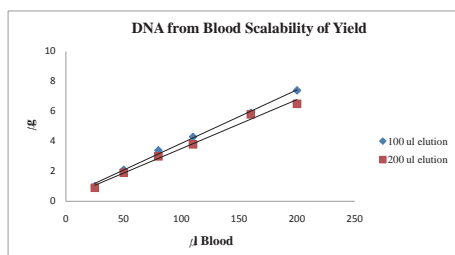
- Ready-to-run program.
- Purifies at least 6µg of Genomic DNA from 200µl whole blood within approx. 40 mins.
- Purified DNA with $A_{260}/_{280}$ ratio between 1.8 and 2.0.
- Direct use in downstream studies such as PCR, restriction enzyme digestion.
- Walk-away automation system.

Genomic DNA is suitable for diverse downstream detection methods

Genomic DNA purified by the MagCore Whole Blood Genomic DNA Extraction Kit is ideal for sensitive downstream applications such as PCR, Real-Time PCR and multiple PCR. The reliability and binding capacity of the MagCore system allows the user to routinely operate genomic purification protocols worry-free.

Scalability

To show the scalability of DNA isolation, blood samples (20 µl, 50 µl, 80 µl, 100 µl, 150 µl, 200 µl) were processed on the MagCore® HF16. The amount of DNA was determined by A_{260} measurement.



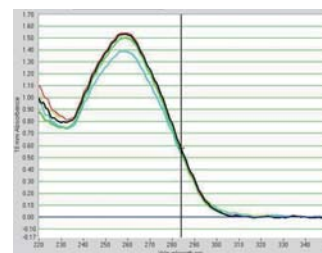
Consistent Yield and Purity



Genomic DNA was purified from different healthy whole blood samples (0.2 ml and 0.4ml) by MagCore HF16. The isolated genomic DNA was eluted in 100 µl and 200 µl of elution buffer.

High DNA quality

The spectrum shows five different whole blood samples, which have the same DNA quality and quantity. Absorbance was determined by NanoDrop N1000.



For extracting Viral DNA/RNA from serum, plasma, cell-free body fluids

MagCore® Viral Nucleic Acid Extraction Kit

When it comes to automated viral extraction, the MagCore® Viral Nucleic Acid Extraction kit and MagCore® HF16 System should be your first choice. With all the kit components of plastic consumables are DNase/RNase-Free pretreated, and individual processing track for each loaded samples, this system eliminates all possible cross contamination between samples. Built-in protocol with flexibility in sample source volumes, both viral DNA and RNA can be extracted using the same kit in a fast and economical way.

Cartridge Code 201



Cat.No. MVN400-01

MagCore® Viral Nucleic Acid Kit
Pre-filled Cartridge Reagent: 36 pcs.
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
Carrier RNA (1mg): 1 pcs.
RNase Free Water (1.25ml): 1 pcs.
Proteinase K(11mg): 1 pcs.
PK Storage Buffer(1.25ml): 1 pcs.

Cat.No. MVN400-02

MagCore® Viral Nucleic Acid Kit
Pre-filled Cartridge Reagent: 96 pcs.
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
Carrier RNA (1mg): 1 pcs.
RNase Free Water (1.25ml): 1 pcs.
Proteinase K(11mg): 2 pcs.
PK Storage Buffer(1.25ml): 2 pcs.

Cartridge Code 202



Cat.No. MVN400-03

MagCore® Viral Nucleic Acid Kit
(Low PCR Inhibition)
Pre-filled Cartridge Reagent: 36 pcs.
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
Carrier RNA (1mg): 1 pcs.
RNase Free Water (1.25ml): 1 pcs.
Proteinase K(11mg): 1 pcs.
PK Storage Buffer(1.25ml): 1 pcs.

Cat.No. MVN400-04

MagCore® Viral Nucleic Acid Kit
(Low PCR Inhibition)
Pre-filled Cartridge Reagent: 96 pcs.
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
Carrier RNA (1mg): 1 pcs.
RNase Free Water (1.25ml): 1 pcs.
Proteinase K(11mg): 2 pcs.
PK Storage Buffer(1.25ml): 2 pcs.

Applications

For general laboratory use. The purified total nucleic acid is suitable for highly sensitive and quantitative PCR. MagCore Viral Nucleic Acid Extraction Kit has been performed and proved with HBV, HCV, HIV and influenza viruses as downstream applications.

Advantages

- High performance with downstream applications such as qPCR
- Directly use in downstream studies such as PCR and Restriction Digestion
- Pre-filled cartridge with all reagents independently sealed prevents contamination
- Disposable cartridges and pipette tips per extraction prevents cross contamination
- True walk-away extraction system
- UV light and stainless steel surfaces for easy cleaning

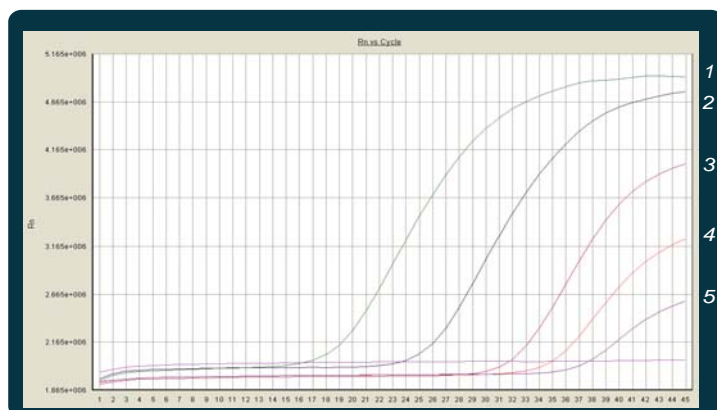
Performance

MagCore Viral Nucleic Acid Extraction Kit Real-Time PCR testing

As can be seen in the accompanying curve, RBC's MagCore Viral Nucleic Acid Extraction System provides sufficient purified viral nucleic acid for sensitive downstream detection systems such as Real-Time PCR.

HBV detection by Real-Time PCR

RBC MagCore® Viral Nucleic Acid Extraction Kit was used to purify serum containing different concentrations of HBV. The HBV nucleic acid was subsequently detected by Real-Time PCR.



For extracting Viral DNA/RNA from serum, plasma, cell-free body fluids **NEW**

MagCore® Viral Nucleic Acid Extraction Large Volume Kit (2.4 ml)

When it comes to automated viral extraction, the MagCore® Viral Nucleic Acid Extraction Large Volume kit (2400 µl) and MagCore® HF16 System should be your first choice. With all the kit components of plastic consumables are DNase/RNase-Free pretreated, and individual processing track for each loaded samples, this system eliminates all possible cross contamination between samples. Built-in protocol with flexibility in sample source volumes, both viral DNA and RNA can be extracted using the same kit in a fast and economical way.



Cartridge Code 210

Cat.No. NVN2400

MagCore® Viral Nucleic Acid Extraction Large Volume Kit

Pre-filled cartridge: 96 pcs.
MagCore HF Pipette Tip Set: 100 pcs.
5ml Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
Carrier RNA (1mg): 2 pcs.
RNase-Free Water (1.25ml): 2 pcs.
Proteinase K (11mg): 4 pcs.
PK Storage Buffer (1.25ml): 4 pcs.



Storage and Stability

- (1) The kit should be stored at room temperature.
- (2) Proteinase K should be stored at -20°C when mixing with PK Storage Buffer.

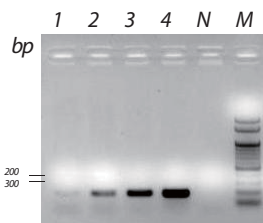


Figure 1. HBV sensitive detection by Nested PCR

Used RBC MagCore® Viral Nucleic Acid Extraction kit to purify serum contains different concentration HBV, and then detected HBV by Nested PCR.

Lane 1, 10^8 HBV serums. Lane 2, 10^7 HBV serums.
Lane 3, 10^6 HBV serums. Lane 4, 10^5 HBV serums.
Lane N, Negative control.
Lane M, RBC 100 bp DNA Ladder Marker.

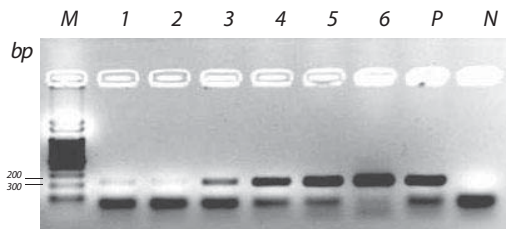


Figure 2. HCV sensitive detection by Nested PCR

Used RBC MagCore® Viral Nucleic Acid Extraction kit to purify serum contains different concentration HCV, and then detected HCV by Nested PCR.

Lane 1, 5×10^7 HCV serums. Lane 2, 5×10^6 HCV serums.
Lane 3, 5×10^5 HCV serums. Lane 4, 5×10^4 HCV serums.
Lane 5, 5×10^3 HCV serums. Lane 6, 5×10^2 HCV serums.
Lane P, Positive control.
Lane N, Negative control.
Lane M, RBC 100 bp DNA Ladder Marker.

For Genomic DNA purification from cultured cells NEW MagCore® Cultured cells DNA Kit

MagCore® Cultured cells DNA Kit is designed to extract genomic DNA from up to 5×10^6 cultured cells via automatic machine, MagCore® HF16. The kit contains all required reagent and labware for automated purification using magnetic-particle technology. Reagents are supplied in prefilled cartridges, which can be loaded into machine directly without extra work. Easy select program code number 110 in MagCore® HF16 and combine using MagCore® Cultured cells DNA Kit can perform high quality genomic DNA.



Cartridge Code 110

Cat.No. MCC-01

MagCore® Cultured cells DNA Kit
Pre-filled Cartridge Reagent: 36 pcs.
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
Proteinase K (11mg): 1pcs.
PK Storage Buffer (1.25ml): 1pcs.

Cat.No. MCC-02

MagCore® Cultured cells DNA Kit
Pre-filled Cartridge Reagent: 96 pcs.
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
Proteinase K (11mg): 2pcs.
PK Storage Buffer (1.25ml): 2pcs.

Storage and Stability

- (1) The kit should be stored at room temperature.
- (2) Proteinase K should be stored at -20°C when mixing with PK Storage Buffer.

Features

Quick, Simple Extraction

MagCore – culture cell DNA – is based on the principle that cellulose coated magnetic beads bind genomic DNA, enabling quick simple extraction.

Provides high purity genomic DNA

The genomic DNA extracted with this kit rarely contains impurities such as RNA and proteins, allowing for direct use in enzymatic reactions such as PCR or real time PCR.

No Phenol or Chloroform Extraction

This Kit does not need to use of harmful phenol or chloroform so there is no hazardous waste problem.

Applications

For general laboratory use. Using magnetic-particle technology to purified genomic DNA from 5×10^6 cultured cells.

The purified genomic DNA can be directly used for downstream applications like quantitative PCR, restriction enzyme digestion, southern blotting.

Advantage

- High performance with downstream applications such as qPCR
- Directly use in downstream studies such as PCR and Restriction Digestion
- Pre-filled cartridge with all reagents independently sealed prevents contamination
- Disposable cartridges and pipette tips per extraction prevents cross contamination
- Walk-away extraction system
- UV light and stainless steel surfaces for easy cleaning

Performance



	1	2	3
1. EDTA	16.44	13.08	24.42
2. Sodium Citrate	1.93	1.87	1.92

The DNA of three different culture cells were extracted by MagCore HF16 with culture cell DNA kit (200μL sample volume) without RNAase. The data showing that the yield and purity of three samples are extracted by MagCore HF16 and kit 110 for culture cell. sample 1: COS 7 (1.2×10^7); sample 2: Junkat (1×10^6); sample 3: HEK293 (1×10^6).

For extracting Genomic DNA from plant tissues MagCore® Genomic DNA Plant Kit

MagCore® Genomic DNA Plant Kit has been designed for purification of DNA from plant tissues and cells by using automated instrument of MagCore® HF16. The provided Filter Column Set can filtrate hard tissue sample to prevent tissue residues to obstruct pipette syringe during the process of MagCore® HF16. The kit contains all required reagent and labware for automated purification using magnetic-particle technology. Reagents are supplied in prefilled cartridges, which can be loaded into machine directly without extra work. Easy select program code number 301 in MagCore® HF16 and combine using kit can perform high quality genomic DNA.



Cartridge Code 301

Cat.No. MGP-01

MagCore® Genomic DNA Plant Kit

Pre-filled Cartridge Reagent: 36 pcs.

Pipet Tip: 36 pcs.

Tip Holder: 36 pcs.

Sample Tube: 36 pcs.

Elution (Eppendorf) Tube: 36 pcs.

Filter Column: 36 pcs.

* RNase A (10mg/ml, 275µl): 1 pcs.

GP1 Buffer (25 ml): 1 pcs.

GP2 Buffer (6 ml): 1 pcs.

Cat.No. MGP-02

MagCore® Genomic DNA Plant Kit

Pre-filled Cartridge Reagent: 100 pcs.

Pipet Tip: 100 pcs.

Tip Holder: 100 pcs.

Sample Tube: 100 pcs.

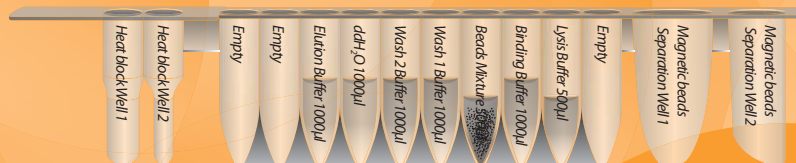
Elution (Eppendorf) Tube: 100 pcs.

Filter Column: 100 pcs.

* RNase A (10mg/ml, 550µl): 1 pcs.

GP1 Buffer (50 ml): 1 pcs.

GP2 Buffer (15 ml): 1 pcs.



Storage and Stability

(1) The kit should be stored at room temperature.

(2) * Store RNaseA solution at 4°C when kit arrived for long term storage.

Features

- Quick, Simple Extraction
- MagCore – Genomic DNA bacteria – is based on the principle that cellulose coated magnetic beads bind Genomic DNA, enabling quick simple extraction.
- Provides high purity genomic DNA
- The genomic DNA extracted with this kit rarely contains impurities such as RNA and proteins, allowing for direct use in enzymatic reactions such as PCR or real time PCR.
- Efficient Extraction of long genomic sequences from plants
- Allowed the extraction of high purity polymer DNA from plant samples including leaves or seed.

Applications

For general laboratory use. Using magnetic-particle technology to purified genomic DNA up to 100 mg of fresh tissue The purified genomic DNA can be directly used for downstream applications like quantitative PCR, PCR, southern blotting, RADP / AFLP.

Performance

DNA was extracted from < 50mg of sample leaves or seed.

Sample ID	Position	Yield (ng/µl)
Citrus nobilis Lour.	Leaf	36.5
Carica papaya	Leaf	49.2
Lycopersicon esculentum	Leaf	71.9
Citrullus lanatus	Leaf	23.4
Anisogonium esculentum	Leaf	240.3
Trachycarpus fortunei	Leaf	154.7
Mentha piperita	Leaf	54.6
Anthoceros punctatus	Leaf	38.9
Calix babylonica	Leaf	80.7
Prunus campanulata	Leaf	35.7
Lxeris chinensis	Leaf	161.4
Capsicum annum	Leaf	13.9
Vigna radiata	Seed	7.0
Medicago sativa	Leaf	21.0
Vigna angularis	Seed	5.8
Agaricus bisporus	Whole	14.3

For extracting Genomic DNA from a variety animal tissues, paraffin-embedded tissue, swab and blood

MagCore® Genomic DNA Tissue Kit

MagCore® Genomic DNA Tissue Kit is designed for purification of total DNA (including genomic, mitochondrial and viral DNA) from a variety of animal tissues or cells by using automated instrument of MagCore® HF16. The provided Filter Column Set can filtrate hard tissue sample or swab sample to prevent tissue residues to obstruct pipette syringe during the process of MagCore® HF16. The method uses pre-filled cartridge contains proteinase K and a chaotropic salt, guanidine hydrochloride to lysis cells and degrade protein. DNA in chaotropic salt binds to cellulose coated magnetic beads. After washing off the contaminants, the purified DNA is eluted by low salt elution buffer or water. Purified DNA of approximately 20-30 kb in length is suitable for PCR or other enzymatic reactions.



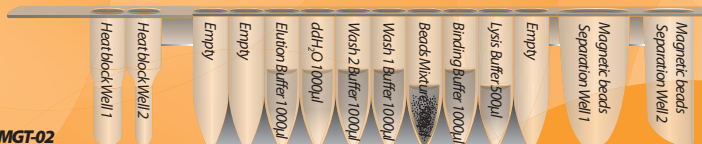
Cartridge Code 401

Cat.No. MGT-01

MagCore® Cultured cells DNA Kit
Pre-filled Cartridge Reagent: 36 pcs.
Pipet Tip: 36 pcs.
Tip Holder: 36 pcs.
Sample Tube: 36 pcs.
Elution (Eppendorf) Tube: 36 pcs.
GT Buffer(30ml): 1 pcs.
Filter Column: 36pcs.
Proteinase K (11mg): 1pcs.
PK Storage Buffer (1.25ml): 1pcs.

Cat.No. MGT-02

MagCore® Cultured cells DNA Kit
Pre-filled Cartridge Reagent: 96 pcs.
Pipet Tip: 100 pcs.
Tip Holder: 100 pcs.
Sample Tube: 100 pcs.
Elution (Eppendorf) Tube: 100 pcs.
GT Buffer(30ml): 2 pcs.
Filter Column: 100 pcs.
Proteinase K (11mg): 2 pcs.
PK Storage Buffer (1.25ml): 2 pcs.



Storage and Stability

- (1) The kit should be stored at room temperature.
- (2) Proteinase K should be stored at -20°C when mixing with PK Storage Buffer.

Features

Quick, Simple Extraction

MagCore – Genomic DNA Tissue – is based on the principle that cellulose coated magnetic beads bind genomic DNA, enabling quick simple extraction.

Provides high purity genomic DNA

The genomic DNA extracted with this kit rarely contains impurities such as RNA and proteins, allowing for direct use in enzymatic reactions such as PCR or real time PCR.

No Phenol or Chloroform Extraction

This Kit does not need to use of harmful phenol or chloroform so there is no hazardous waste problem.

Advantages

- High performance with downstream applications such as qPCR
- Directly use in downstream studies such as PCR and Restriction Digestion
- Pre-filled cartridge with all reagents independently sealed prevents contamination
- Disposable cartridges and pipette tips per extraction prevents cross contamination
- Walk-away extraction system
- UV light and stainless steel surfaces for easy cleaning

Performance

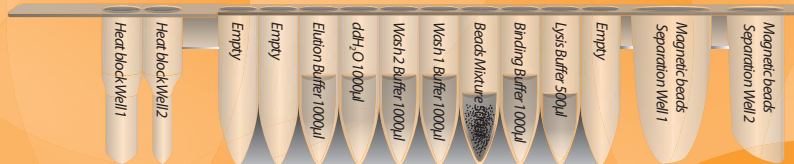
DNA was extracted from 10 mg of mice tissue and 0.25 cm tail.

Sample ID	Yield (ng/ul)
Liver	17.5
Spleen	17.5
Brain	10
Lung	12.5
Kidney	32.5
Tail	7.5

For Extracting Genomic DNA from Bacteria

MagCore® Genomic DNA Bacterial Kit

MagCore® Genomic DNA Bacterial kit is designed to extract genomic DNA from both Gram+ and Gram- bacteria via automatic machine, MagCore® HF16. The kit contains all required reagent and labware for automated purification using magnetic-particle technology. Reagents are supplied in prefilled cartridges, which can be loaded into machine directly without extra work. Easy select program code number 502 in MagCore® HF16 and combine using MagCore® Genomic DNA Bacterial Kit can perform high quality genomic DNA.



Cartridge Code 502

Cat.No. MBB-01

MagCore® Genomic DNA Bacterial Kit

Pre-filled Cartridge Reagent: 36 pcs.

Pipet Tip: 36 pcs.

Tip Holder: 36 pcs.

Sample Tube: 36 pcs.

Elution (Eppendorf) Tube: 36 pcs.

Lysozyme Reaction Buffer (15ml): 1 pcs.

Proteinase K (11mg): 2 pcs.

PK Storage Buffer: 4 pcs.

* RNase A (50mg/ml, 160µl): 1 pcs.

Cat.No. MBB-02

MagCore® Genomic DNA Bacterial Kit

Pre-filled Cartridge Reagent: 96 pcs.

Pipet Tip: 100 pcs.

Tip Holder: 100 pcs.

Sample Tube: 100 pcs.

Elution (Eppendorf) Tube: 100 pcs.

Lysozyme Reaction Buffer (30ml): 1 pcs.

Proteinase K (11mg): 4 pcs.

PK Storage Buffer: 4 pcs.

* RNase A (50mg/ml, 160µl): 1 pcs.

Storage and Stability

(1) The kit should be stored at room temperature.

(2) Proteinase K should be stored at -200C when mixing with PK Storage Buffer.

(3) * RNaseA solution at 40C when kit arrived for long term storage.

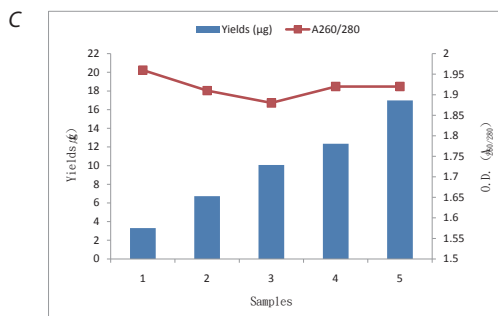
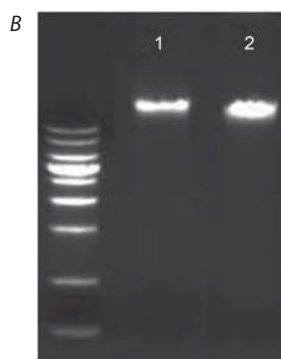
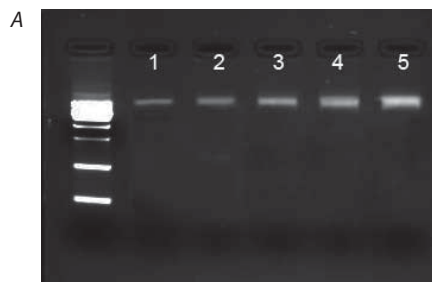
Features

- Quick, Simple Extraction
- MagCore – Genomic DNA bacteria – is based on the principle that cellulose coated magnetic beads bind genomic DNA, enabling quick simple extraction.
- Provides high purity genomic DNA
- The genomic DNA extracted with this kit rarely contains impurities such as RNA and proteins, allowing for direct use in enzymatic reactions such as PCR or real time PCR.
- No Phenol or Chloroform Extraction
- This Kit does not need to use of harmful phenol or chloroform so there is no hazardous waste problem.

Applications

For general laboratory using. Magnetic-particle technology was used to purified genomic DNA from both Gram(+) and Gram(-) bacteria. The purified genomic DNA can be directly used for downstream applications like quantitative PCR, restriction enzyme digestion, southern blotting.

Performance

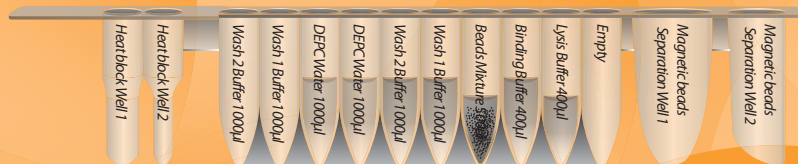


Genomic DNA was extracted from different volume of bacteria (*Bacillus subtilis*) suspension (Sample1:0.25ml; 2: 0.5ml; 3: 0.75ml; 4: 1ml, 5: 2ml; Figure A) and in the figure B, both of the Gram (-) *E. coli* DH5a (line1) and the Gram (+) *B. subtilis* (line2) could be extracted the bacterial DNA by the MagCore HF16 extractor and Genomic DNA bacterial kit (502). And the yield result showed the MagCore system is very stable (Figure C), and purity result showed that use this kit allows extraction of high purity genomic DNA from Bacterial sample (Figure C)

For Total RNA purification from white blood cells of human whole blood

MagCore® Total RNA Whole Blood Kit

MagCore® Total RNA Whole Blood Kit is specially designed for total RNA purification from up to 0.4ml human whole blood by using automated instrument of MagCore® HF16. The program provides optional protocol for contaminated genomic DNA remove. Combine RBC high quality RNase-free DNase I with MagCore® total RNA Whole Blood Kit can provide high quality DNA-free total RNA, and can get high sensitivity result for downstream applications like qRT-PCR.



Cartridge Code 601

Cat.No. MRN-01

MagCore® Total RNA Whole Blood Kit

Pre-filled Cartridge Reagent: 36 pcs.

Pipet Tip: 36 pcs.

Tip Holder: 36 pcs.

Sample Tube: 36 pcs.

Elution (Eppendorf) Tube: 36 pcs.

RBC Lysis Buffer: 100 ml

RB Buffer: 15 ml

Cat.No. MRN-02

MagCore® Total RNA Whole Blood Kit

Pre-filled Cartridge Reagent: 100 pcs.

Pipet Tip: 100 pcs.

Tip Holder: 100 pcs.

Sample Tube: 100 pcs.

Elution (Eppendorf) Tube: 100 pcs.

RBC Lysis Buffer: 200 ml

RB Buffer: 30 ml

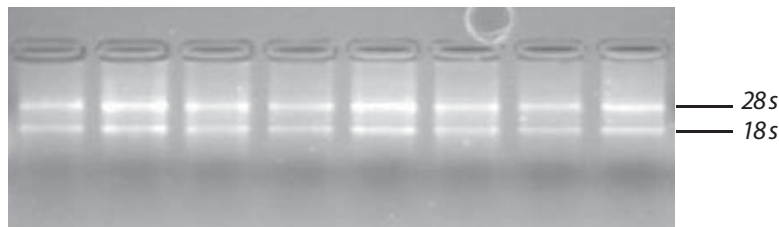
Storage and Stability

(1) The kit should be stored at room temperature.

Applications

For general laboratory use. Using magnetic-particle technology to purified total RNA. The purified RNA can be directly used for downstream application like real-time PCR, RT-PCR, cDNA synthesis.

Performance



Total RNA was isolated from human whole blood samples with the MagCore HF16 and Total RNA Whole Blood kit (400 µl sample volume) and the yield is 1 µg / 400 µl in whole blood.

Eight replicates were applied to an agarose gel, showing that purified total RNA were present without signs of degradation.



MagCore[®] Extraction Kit

