

MagCore® Nucleic Acid Extraction Kits



For extraction of genomic DNA from human whole blood sample

MagCore® Genomic DNA Whole Blood Kit is designed for extraction of total DNA (including genomic, mitochondrial and viral DNA) from whole blood, plasma, serum and buffy coat. The pre-filled cartridge contains proteinase K, a chaotropic salt, and guanidine hydrochloride for cell lysis and protein degradation. They enhance the binding between cellulose-coated magnetic beads and DNA. High quality DNA is eluted by low salt elution buffer or water after the removal of contaminants. Purified DNA of approximately 20-30 kb is suitable for PCR or other downstream applications.

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MagCore® Genomic DNA Whole Blood Kit (Speedy installation)



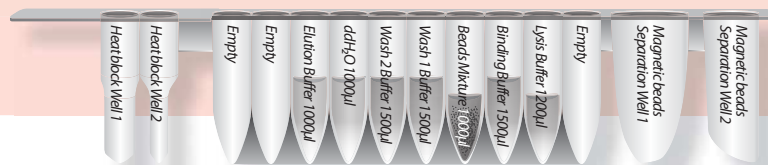
102

MagCore® Genomic DNA Whole Blood Kit



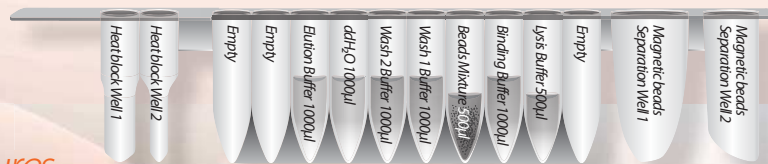
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MagCore® Genomic DNA Large Volume Whole Blood Kit (1.2 ml)



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MagCore® Genomic DNA Whole Blood Kit (For Genotyping)



Features

1. High performance of purified DNA in downstream applications such as qPCR.
2. High analytical sensitivity
3. Cartridges are pre-filled and sealed to prevent contamination.
4. Walkaway processing improves work efficiency.

Applications

The MagCore® Genomic DNA Whole Blood Kit is designed to allow automated processing of multiple sample types in the same run. Sample types include:

1. Fresh and frozen whole blood
2. Buffy coat
3. Body fluids

High quality DNA available for various downstream applications, including:

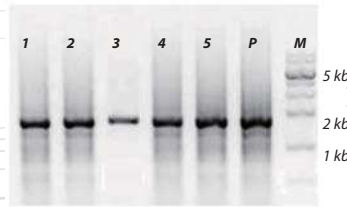
1. PCR and real time PCR
2. Genotyping or sequencing
3. SNP, STR



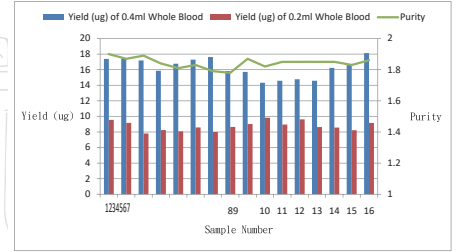
Performance

DNA quality unaffected by anticoagulants

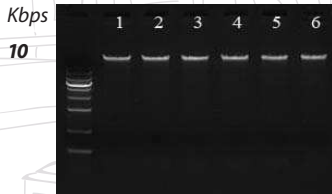
Anticoagulant	A _{260/280}	Conc.(ng/μl)
1. EDTA	1.87	99.3
2. Sodium Citrate	1.87	86.1
3. Lithium Heparin(4ml)	1.95	106.02
4. Sodium Fluoride	1.91	113.16
5. Lithium Heparin(9ml)	1.95	101.34



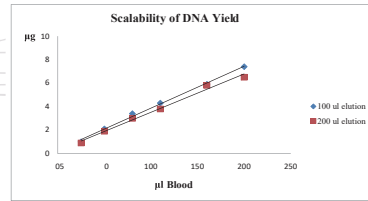
Consistent yield and purity



It is shown that there is a scalability of DNA isolation from blood samples (20, 50, 80, 100, 150, and 200 μl) by the MagCore® HF16. The amount of DNA was determined by A₂₆₀ measurement.



Linear Increase in DNA yield



MagCore® Automated Nucleic Acid Kits Specification

MagCore® Super/HF16 Plus/Plus II

MagCore® HF16 / Compact / HF48

Cartridge Code	MagCore® Super/HF16 Plus/Plus II			MagCore® HF16 / Compact / HF48			Running Time
	Cat No.	Cat No.	Cat No.	Cat No.	Cat No.	Cat No.	
	36 preps	72 preps	96 preps	36 preps	72 preps	96 preps	

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MagCore® Genomic DNA Whole Blood Kit (Speedy installation)

For 200 and 400 μl sample volumes.
Contents: Pre-Filled Cartridges (Including Proteinase K), Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes
Shelf life: 12 months

MGB400-01	MGB400-02	39 min (sample volume:200 μl) 50 min (sample volume:400 μl)	MGB400-01	MGB400-02	44 min (sample volume:200 μl) 57 min (sample volume:400 μl)
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MagCore® Genomic DNA Whole Blood Kit

For 200 and 400 μl sample volumes.
Contents: Pre-Filled Cartridges (Including Proteinase K), Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes
Shelf life: 18 months

MGB400-03	MGB400-04	39 min (sample volume:200 μl) 50 min (sample volume:400 μl)	MGB400-03	MGB400-04	44 min (sample volume:200 μl) 55 min (sample volume:400 μl)
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MagCore® Genomic DNA Large Volume Whole Blood Kit (1.2 ml)

For 1200 μl sample volumes.
Contents: Pre-Filled Cartridges (Including Proteinase K), Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes
Shelf life: 18 months

MGB1200	MGB1200	76 min (sample volume:1200 μl)	MGB1200	MGB1200	83 min (sample volume:1200 μl)
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MagCore® Genomic DNA Whole Blood Kit (For Genotyping)

For 200 and 400 μl sample volumes.
Contents: Pre-Filled Cartridges (Including Proteinase K), Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes
Shelf life: 18 months

MGB400-07	MGB-400-08	41 min (sample volume:200 μl) 53 min (sample volume:400 μl) *optical detection is not provided	MGB400-07	MGB-400-08	44 min (sample volume:200 μl) 57 min (sample volume:400 μl) (Applicable models: HF16, Compact)
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Enzyme Selection Guide

Product	Contents	Cat No.
Proteinase K Set	11 mg Proteinase K, 1.25 ml PK Storage Buffer	PK011
RNase A	50 μl RNase A (50mg/ml)	RN050
	130 μl RNase A (50mg/ml)	RN130



RBC Bioscience Corp.
www.rbcbioscience.com
info@rbcbioscience.com