

MagCore® Nucleic Acid Extraction Kits



For genomic DNA extraction from cultured cells and amniotic fluid

MagCore® Cultured Cells DNA Kit is designed to extract genomic DNA from up to 5×10^6 cultured cells using MagCore® automated extraction systems. The kit contains all required reagents and labware for automated extraction using magnetic-particle technology. Reagents are supplied in pre-filled cartridges, which can be easily loaded into the MagCore® instrument.

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MagCore® Cultured cells DNA Kit



Features

1. High performance of purified DNA in downstream applications such as qPCR.
2. Efficient isolation of DNA from up to 5×10^6 cells.
3. Cartridges are pre-filled and sealed to prevent contamination.
4. No phenol or chloroform extraction.
5. Efficient removal of contaminants and inhibitors.

Applications

High quality DNA available for various downstream applications, including:

1. PCR and real-time PCR
2. Next Generation Sequencing (NGS)



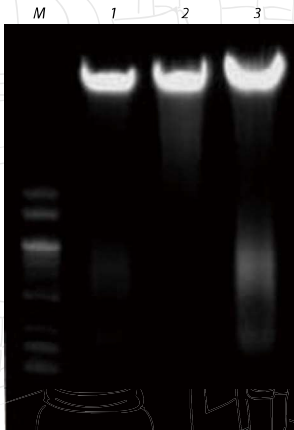
Performance

DNA quality analysis by Spectrophotometer

DNA of three different cultured cells were extracted by the employment of MagCore® HF16 and MagCore® Cultured Cells DNA Kit (200µl sample volume). The following data show the yield and purity of DNA of three samples.

Sample 1: COS7 (1.2x10⁷)
 Sample 2: Junkat (1x10⁹)
 Sample 3: HEK293 (1x10⁹)

	1	2	3
Yield (mg)	16.44	13.08	24.42
DNA purity (A _{260/280})	1.93	1.87	1.92



Amniotic fluid DNA extraction

Result

DNA quality is checked by the NanoDrop spectrophotometer and agarose gel electrophoresis after DNA purification from amniotic-fluid cells. Cells were harvested from 10~15 ml amniotic fluid samples at pregnancy weeks 16-18 by centrifugation for 10 minutes at 3000rpm.

Sample ID	Conc. (pg/µl)	A _{260/280}	A _{260/230}	Yield (µg)
(1) GPT2967P	22.68	1.84	1.07	1.36
(2) GPT2952P	33.98	1.92	1.57	2.04
(3) NP679P	33.65	1.80	1.34	2.02
(4) NP777P	39.22	1.86	1.20	2.35
(5) MP795P	22.05	1.79	0.97	1.32

by NanoDrop ND-1000

Table 1. DNA quality analysis by NanoDrop.

Sample ID (1) to (5) are different amniotic fluid samples. It is shown that MagCore® HF16 system can purify 1~2 µg DNA from 10~15 ml amniotic fluid samples and DNA purity is with the A_{260/280} ratio of around 1.8±0.1

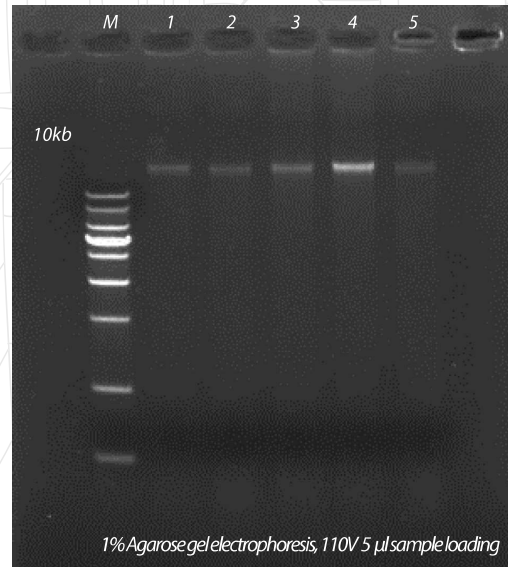


Figure 1. Genomic DNA isolations were run by gel electrophoresis on 1% agarose gel. Lane M: RBC 1kb ladder marker. Lane 1: GPT2967P. Lane 2: GPT2952P. Lane 3: NP679P. Lane 4: NP777P. Lane 5: NP795P.

MagCore® Automated Nucleic Acid Kits Specification

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

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MagCore® Cultured Cells DNA Kit

For 200µl sample volumes (up to 5x10⁶ cells)

Contents: Pre-Filled Cartridges, Proteinase K, PK Storage Buffer, Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes

Shelf life: 18 months

MCC-01SP	MCC-02SP	39 min (sample volume: 200µl, up to 5x10 ⁶ cells) *optical detection is not provided	MCC-01	MCC-02	44 min (sample volume: 200µl, up to 5x10 ⁶ cells)
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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



FDA (10055336) registered and CE-IVD certified (Instruments & Reagents)
 Manufactured in accordance with quality system requirements that comply with ISO 13485 standards and QSR



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