MagCore® Cultured Cells DNA Kit

For extraction of genomic DNA from cultured cells and amniotic fluid.
Applicable Models : HF16, Compact, HF48, Super, HF16 Plus, Plus II

Cartridge Code 110

Cat.No. MCC-01 // MCC-02

Kit Contents

Check that the following parts are included in addition to the main unit:

Cat.No. MCC-01 Contents:

Pre-filled Cartridge Reagent	*36 pcs.*
Pipet Tip plus Holder Set	*36 sets.*
Sample Tube	*36 pcs.*
Elution Tube	*36 pcs.*
Proteinase K(11mg)	*1 pcs.*
PK Storage Buffer	*1 pcs.*

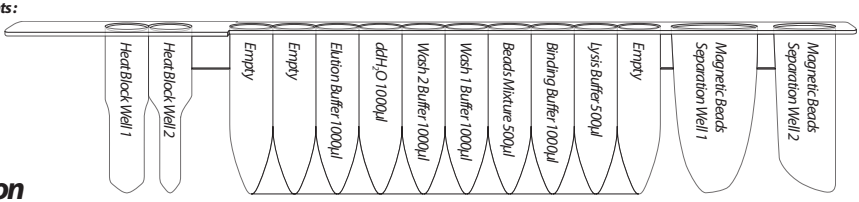
Cat.No. MCC-02 Contents:

Pre-filled Cartridge Reagent	*96 pcs.*
Pipet Tip plus Holder Set	*100 sets.*
Sample Tube	*100 pcs.*
Elution Tube	*100 pcs.*
Proteinase K(11mg)	*2 pcs.*
PK Storage Buffer	*2 pcs.*

Storage and Stability :

1. This kit should be stored at room temperature.
2. Proteinase K should be stored at 2-8 °C upon arrival.
3. Shelf Life: 18 Months.

Cartrige Contents :



Description

MagCore® Cultured cells DNA Kit is designed to extract genomic DNA from up to 5x10^6 cultured cells via MagCore® autoextraction instrument. The kit contains all required reagents and labware for automated purification using magnetic-particle technology. Easy select program code number 110 in MagCore® and combine using MagCore® Cultured Cells DNA Kit to extract high quality genomic DNA.

Applications

Using magnetic-particle technology to purify genomic DNA from 5x10^6 cultured cells. The purified genomic DNA can be directly used for downstream application such as quantitative PCR, restriction enzyme digestion, southern blotting, etc.

Preparation Before Using

1. Add 1.1ml PK Storage Buffer to the Proteinase K tube and mix by vortexing. Store prepared Proteinase K (10mg/ml) at 2-8 ℃
2. Ensure PBS buffer have been prepared for resuspend cell pellet.

Protocol

Sample Preparation

A. Cells grown in suspension

Cells grown in suspension (up to 5 x 10^6 cells). Determine the number of cells. Centrifuge the appropriate number of cells for 5 min. at 300 x g in a 1.5 ml microcentrifuge tube (not provided). Remove the supernatant completely and discard. Continue with MagCore® Operation step 1.

B. Cells grown in a monolayer

Cells grown in a monolayer (up to 5 x 10^6 cells). Cells grown in a monolayer can be detached from the culture flask by either trypsinization or using a cell scraper.

To trypsinize cells:

Determine the number of cells. Aspirate the medium and wash cells with PBS (not provided). Aspirate the PBS, and add 0.10–0.25% trypsin. After cells have detached from the dish or flask, collect them in medium, and transfer the appropriate number of cells(up to 5 x 10^6 cells) to a 1.5 ml microcentrifuge tube (not provided). Centrifuge for 5 min. at 300 x g. Remove the supernatant completely and discard taking care to not to disturb the cell pellet. Continue with MagCore® Operation step 1.

Using a cell scraper:

Detach cells from the dish or flask. Transfer the appropriate number of cells (up to 5 x 10^6 cells) to a 1.5 ml microcentrifuge tube and centrifuge for 5 min. at 300 x g. Remove the supernatant completely and discard taking care to not to disturb the cell pellet. Continue with MagCore® Operation step 1.

MagCore® Operation

1. Resuspend cell pellet with PBS Buffer to a final volume of 200 µl.
2. Transfer cell mixture 200 µl and add 20 µl Proteinase K into the MagCore® Sample Tubes.
3. Put the prepared Sample Tube into the correct well of T-Rack. (see page 3-10)
4. Put Elution Tube and Tip Plus Holder Set (HF16,Compact) / Pipette Tip (Super, Plus) into the correct wells of T-Rack. (see page 3-10)
5. Run Code 110 program at MagCore®.

Amniotic Fluid Protocol

Sample Preparation

1. Harvest cells from 10~15 ml amniotic fluid of 16~18 weeks by centrifugation for 10 minutes at 3000 rpm and discard the supernatant.
2. Add 200µl GT Buffer (not provided) to the tube and resuspend the cell pellet, then transfer mixture to new microcentrifuge tube.
3. Add 5~10µl ProteinaseK (10mg/ml) to the sample. Vortex for 5 seconds to mix sample.
4. Incubate at 56℃ for 10 minutes until the sample lysate is clear. During incubation, invert the tube every 3 minutes.
5. Spin down the sample and apply for MagCore®.