

Magtration System **magLEAD** series

Quick Manual

- cell free DNA purification on magLEAD 6gC / 12gC -



Sample matrix and Protocol IC card

Sample matrices (Sample volume 1,000 μ L)

Human serum, plasma that include EDTA or citric acid, urine, pretreated saliva



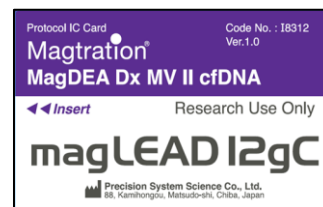
Check!!

Be sure to observe the combination of extraction reagent and protocol. Otherwise, the intended extraction operation may not be performed, resulting in performance degradation or instrument failure.

Cell free DNA extraction protocol (dedicated IC card)



For magLEAD 6gC



For magLEAD 12gC

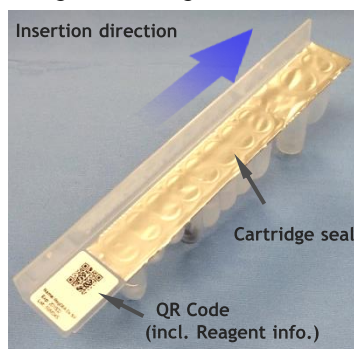


Reagent Cartridge (MagDEA® Dx MV II, Product code : E1323)

Reagent cartridge



Check!!



1. If reagents (especially magnetic particles) are found adhering to the back of the cartridge seal or the well wall, shake the cartridge gently to remove them.
2. If bubbles are seen in the Reagent cartridge, remove them by tapping the cartridge. Bubbles in the cartridge may disrupt complete aspiration and may produce more bubbles by mixing.

Store this reagent at 10-30°C. Avoid high temperature, high humidity and vibration.

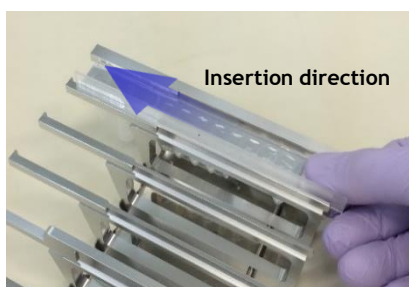
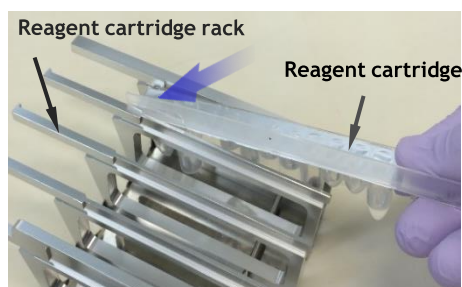
Preserve this reagent with the aluminum seal up.



Preparation of samples and consumables

1. Insertion of reagent cartridge;

Follow the setting direction, insert the Reagent cartridge in the Reagent cartridge rack until it fit and touch the forward end.



2. Setting of samples and consumables;

Essential consumables



- S** 1.5 mL tube (sample 1,000 μ L)
- T2** 2.0mL Cryopreservation Tube^{※1}
- T1** Tip and Tip holder^{※2}
- E** 1.5 mL tube for elution



magLEAD Consumable Kit
(Prod. Code: F4430)



2.0mL Cryopreservation
Tube W/Cap
(Prod. Code: F4450)

^{※1} Not included in the Consumable kit(F4430). Should be purchased separated as product code, F4450.

^{※2} Tip holder will be used as waste collection container. Please note that it contains waste buffer after completion of the run.



Check!!

- Be sure to remove the tube cap before starting run.
- Do not use any other than specified consumables.

Operation Workflow



Check!!

Be sure to use the **MagDEA Dx MV II cfDNA Protocol IC card** (See Fig. at right)

Do not insert or remove the IC card while the power is on.

This may result in damage to the system.

After insertion of the Protocol IC Card, turn on the power.



Please make sure the door is closed.

Instrument will be initialized. Then, HOME menu will be shown. And press "START" button.

MagDEA Dx MV II cfDNA
magLEAD 12gC
ver.1.0
OK = ENT



Check!!

Make sure "MagDEA Dx MV II cfDNA" is displayed.

Caution: Memory full
Oldest Report file
will be erased.
1:Cont ESC:abort run

If the message is shown as Fig. at left :

If you are using the report file management software "magLEAD Communicator", please send the report file store in the device to the PC. If you are not using the software, press "1".

Input batch info?

Yes = ENT
Skip = START

If you want to input batch information of each lane, press "ENT". If not, press "START".

※A barcode reader and PC software are separately required to input batch information(optional).

Start

Reagent cartridge:
MagDEA Dx MV II
Prod.Code : E1323
OK = ENT

SAMPLE

MagDEA Dx MV II
Exp: 2021-12-14
Lot: 25M25V

Reagent Cartridge
QR Code

Check!!

The reagent information will be shown. Make sure the name of the reagent matches the name on the QR code of the reagent cartridge. Even when running the cfDNA protocol, the reagent is "MagDEA Dx MV II".

Hole E : 1.5ml tube
Hole T1 : Tip&Holder

OK = ENT, Prev.=ESC

The display will show you where to place the consumables in the rack. Follow the instructions to set the consumables correctly.

Hole T2 : 2.0ml tube
Hole S : Sample

OK = ENT, Prev.=ESC

This display will show you where to place the sample and consumables in the rack. Follow the instructions to set correctly.

Select elution vol.
1. 50 µl 2. 100 µl
3. 200 µl
Next= 1 - 3, Prev.=ESC

Select the elution volume.
Please press "1" or "2" or "3" key.

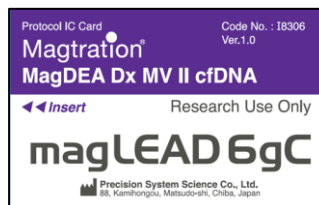
Sample : 1000 µl
Elution : 50 µl

Example

Confirm the purification conditions.

OK=ENT, Prev.=ESC

Cell free DNA extraction protocol (dedicated IC card)



For magLEAD 6gC
(Prod. Code: 18306)



For magLEAD 12gC
(Prod. Code: 18312)

Ready to Start.
Press START key!

Next=START,Prev.=ESC

Press "START" after completion of all preparations.

Make sure the door is closed.

Start

Approx.
55 minutes.

Run

You will hear a beep when the protocol is finished.

COMPLETED!

Press ENT key

The end time of the protocol will be shown.

Open the door.
Remove elution tube,
reagent and plastic
OK = ENT

Open the door and remove the eluate, used consumables and reagent cartridge.

Check!! Please handle as infectious.

UV decontamination?

Yes = ENT
Skip = START

If you want to perform UV decontamination run, please press "ENT", if not, press "START".

Start

All process finished!

Press ENT key

After completion of all process, this message will be shown.

Report file sent

Next = ENT key

Report file transportation message will be shown.

In case of "Not Used" as the Serial port setting:
Report file will not be created, but message will be "sent".

In case of "PC" as the Serial port setting:
Report file will be created/sent, but If the instrument does not connect to an external PC with magLEAD Communicator, the status of report send will be "failed".

Go to HOME menu