

# MagBeads Fast Circulating DNA Kit



Cat. No.: 116577192 (192 PREPS)

## Quick-Start Manual

Revision 1.0 Dec 2023

### Notes before starting:

- Add 9 mL Protease Dissolve Buffer into the Proteinase K, and store at -20~8°C after it dissolves.
- Add 0.31 mL Elution Buffer into the Carrier RNA, and store at -20°C after it dissolves.
- Dilute Buffer MW2 with 2 x 200 mL 100% ethanol and store at room temperature.

## Manual Extraction

1. The Volume of Sample, Proteinase K, Magbeads Particles F, Buffer MLK.

Total Sample Volume ( $\mu\text{L}$ )	200 $\mu\text{L}$	300 $\mu\text{L}$	400 $\mu\text{L}$	500 $\mu\text{L}$	600 $\mu\text{L}$
Proteinase K	15 $\mu\text{L}$	20 $\mu\text{L}$	30 $\mu\text{L}$	35 $\mu\text{L}$	40 $\mu\text{L}$
MagBeads Particles F	20 $\mu\text{L}$	30 $\mu\text{L}$	40 $\mu\text{L}$	50 $\mu\text{L}$	60 $\mu\text{L}$
Buffer MLK	350 $\mu\text{L}$	530 $\mu\text{L}$	700 $\mu\text{L}$	900 $\mu\text{L}$	1000 $\mu\text{L}$
Carrier RNA	Optional: Add 0.1~0.5 $\mu\text{g}$ for each prep. Carrier RNA can reduce the adsorption of DNA on consumables, but carrier RNA can affect the quantification of qubit. Reducing carrier RNA to 100 ng did not significantly affect qubit quantification.				

2. Transfer the Proteinase K and Magbeads Particles F to 2 mL microcentrifuge tube.
3. Add 200~600  $\mu\text{L}$  Plasma or serum to the microcentrifuge tube.
4. Add Buffer MLK to the sample and mix thoroughly by inverting for 15~30 times. Mix upside down for 10 mins at room temperature.
5. Place the tube on the magnetic stand for 3 mins until the beads have formed a tight pellet. Then remove the supernatant.
6. Add 800  $\mu\text{L}$  Buffer MAW1 and vortex for 15 s to resuspend the beads. Place the tube on the magnetic stand for 1 min until the beads have formed a tight pellet. Then remove the supernatant.
7. Add 800  $\mu\text{L}$  Buffer MW2, and vortex for 15 s to resuspend the beads. Place the tube on the magnetic stand for 1 min until the beads have formed a tight pellet. Then remove the supernatant.
8. Add 800  $\mu\text{L}$  Buffer MW2, and vortex for 15 s to resuspend the beads. Place the tube on the magnetic stand for 1 min until the beads have formed a tight pellet. Then remove the supernatant.
9. Centrifuge briefly to collect the liquid on the tube. Place the tube on the magnetic stand and remove all the liquid carefully.
10. Air dry for 10~15 minutes.
11. Add 30~50  $\mu\text{L}$  Elution Buffer/Low TE/Sterile Water and resuspend the beads by vortex. Sit at room temperature for 5 mins. Shake 1~2 times to dissolve the DNA from magnetic particles more efficiently.
12. Place the tube on the magnetic stand for 3 mins.
13. Transfer the supernatant containing the purified DNA to a clean 1.5 mL centrifuge tube.

Extraction

# Ordering Information

## Equipment

Automated extraction system from low to high throughput

Catalog No.	Product Name	Throughput
07EMC043	MPure-32™ aNAP System	Up to 32 samples
07EMC044	MPure-96™ aNAP System	Up to 96 samples



Instruments for lysing and homogenizing environmental and biological samples

Catalog No.	Product Name
116004500	FastPrep™ Classic
116005500	FastPrep-24™ 5G
116010500	FastPrep-96™
116012500	SuperFastPrep-2™

## Reagents

Wide range of reagent kits for extracting and purifying various types of environmental and biological samples for downstream applications.



Catalog No.	Product Name	Pack Size
117033100	(MPure-32™ ) MagBeads FastDNA Kit for Soil (Ready -to-Use)	96 preps
117033200	(MPure-32™ ) MagBeads FastDNA Kit for Feces (Ready-to-Use)	96 preps
117033300	(MPure-32™ ) MagBeads FastDNA/RNA Kit for Virus (Ready-to-Use)	96 preps
117033400	(MPure-32™ ) MagBeads FastRNA Kit (Ready-to-Use)	96 preps
117033500	(MPure-32™ ) MagBeads FastRNA Kit for FFPE (Ready-to-Use)	96 preps
117033600	(MPure-32™ ) MagBeads FastDNA Kit (Ready -to-Use)	96 preps
117033700	(MPure-32™ ) MagBeads FastDNA Kit for Blood (Ready-to-Use)	96 preps
117033800	(MPure-32™ ) MagBeads FastDNA Kit for FFPE (Ready-to-Use)	96 preps
117033900	(MPure-32™ ) MagBeads Fast Circulating DNA Kit (Ready-to-Use)	96 preps



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