

Magnetic Plasmid DNA Purification Kit



Bottle format

CE, FDA, NMPA Registered

1. Description

EmerTher® Magnetic Plasmid DNA Purification Kit is designed to efficiently purify a large amount of plasmid DNA from bacteria culture.

The kit contains superparamagnetic nanoparticles coated through a unique process, enabling strong binding with DNA from a variety of biological samples. DNA can be easily removed from magnetic beads by just using water.

Purified DNA is ready to use in downstream applications.

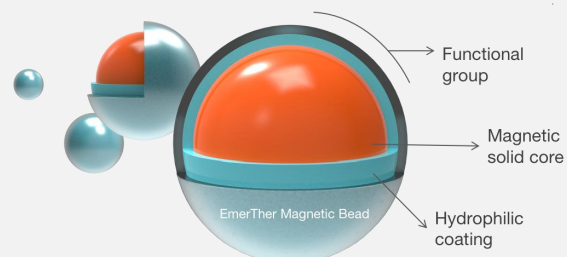
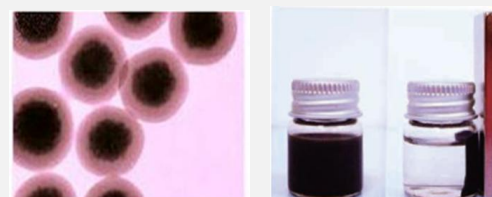
2. Features

High throughput: fast plasmid DNA extraction process

Convenient: all procedures can be performed at room temperature. No high temperature elution is necessary

Environmentally friendly: no guanidine, phenol or chloroform is needed

Automation: designed to be fully compatible with automation for a large scale of plasmid DNA extraction



EmerTher superparamagnetic beads have a solid core consisting of iron oxide clusters, coated with a hydrophilic layer, making it a superior tool to purify biomolecules over similar products.

Uniform nano-superparamagnetic bead mass production capacity + optimized technology and reagent formulation:

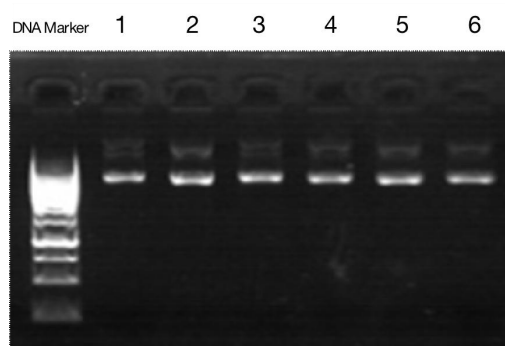
**Reliable and Efficient Extraction,
Originated from Core Technologies**

3. Performance

Representative Extraction Results shown by Gel Electrophoresis and UV Data

Experiment 1

Gel electrophoresis, concentration and purity determination of plasmid DNA extracted from different bacteria cultures

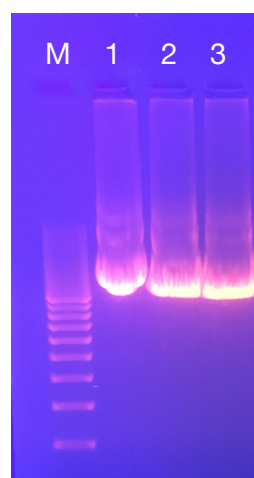


Sample No.	OD260/280	OD260/230	Conc. (ng/μL)	Total DNA (μg)
Sample 1	1.97	2.81	158.40	15.8
Sample 2	1.96	2.69	165.68	16.6
Sample 3	1.98	2.74	166.83	16.7
Sample 4	1.98	2.73	161.78	16.2
Sample 5	1.97	2.71	178.41	17.8
Sample 6	1.96	2.72	140.87	14.1

Bacteria culture volume: 3 mL each; Eluate volume: 100 μL

Experiment 2

Gel electrophoresis, concentration and purity determination of plasmid DNA extracted from different bacteria cultures



Sample No.	OD260/280	OD260/230	Conc. (ng/μL)	Total DNA (μg)
Sample 1	1.89	2.31	532.5	266.3
Sample 2	1.90	2.33	576.4	288.2
Sample 3	1.89	2.32	592.2	296.1

Bacteria culture volume: 50 mL each;
Eluate volume: 500 μL;
Eluate diluted x2 before UV detection

4. Components of the Kits

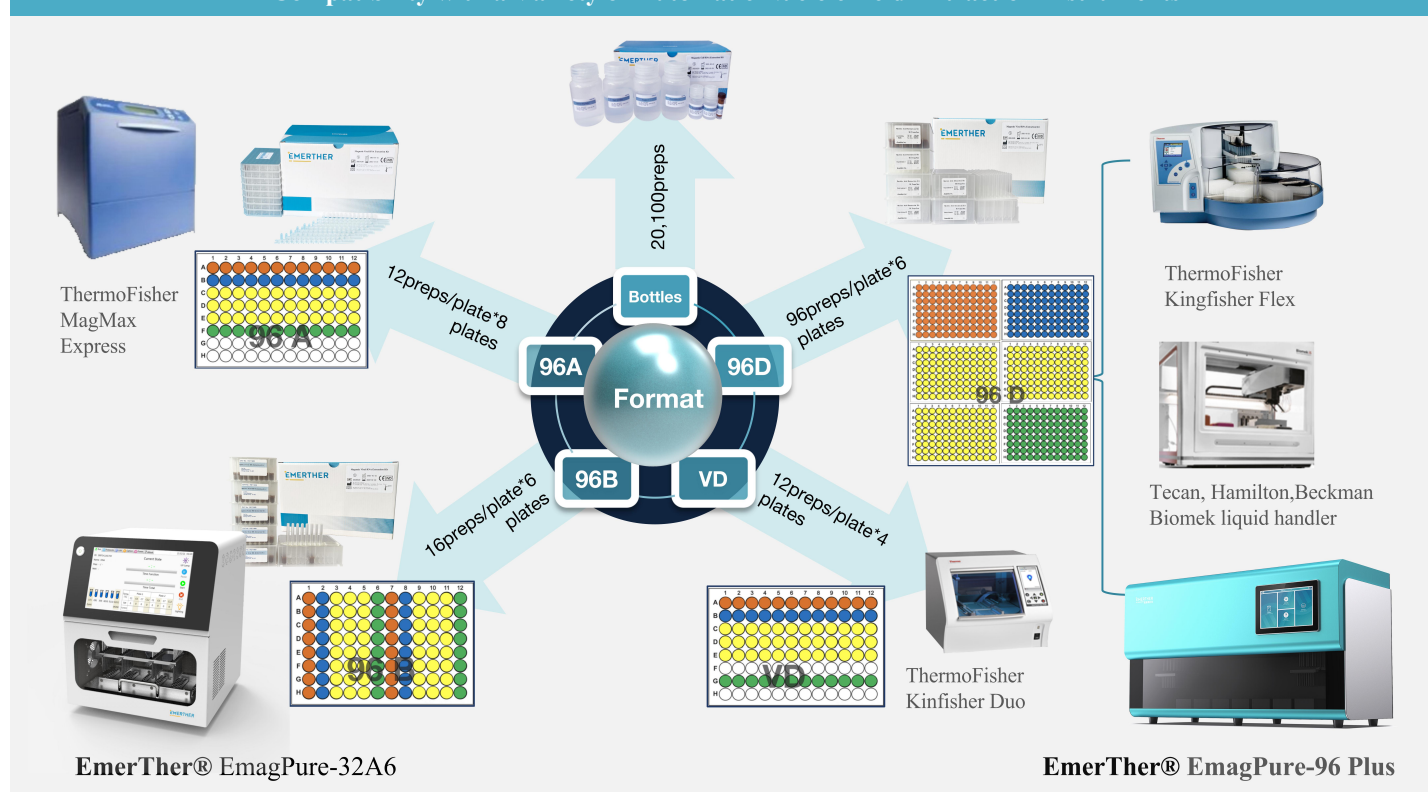
Catalog No.	DE08001 (20 samples)	DE08002 (100 samples)	DE08003 (500 samples)
Solution I	2 mL	10 mL	50 mL
Solution II	3 mL	15 mL	75 mL
Solution III	3 mL	15 mL	75 mL
RNaseA Solution	0.25 mL	1 mL	5 mL
Magnetic Bead Suspension	0.5 mL	2.5 mL	12.5 mL
Binding Solution	4 mL	20 mL	100 mL

Pretreatment: Harvest bacterial cells from 1-5 mL of overnight culture. Centrifuge the sample at 5,000 g for 1 min. Discard supernatant and collect bacteria pellet. Add 100 μ L solution I and 10 μ L RNaseA solution. Mix well and suspend the bacteria pellet in the solution. Add 150 μ L solution II into the bacteria suspension and invert the tube 4-6 times. Add 150 μ L solution III into the suspension and invert the tube 4-6 times immediately (Or use pipette to mix). If complete degradation of RNA is desired, allow the sample stand for 10 min at room temperature. Centrifuge at 15,000 g for 5 min.

5. Compatible instruments

Prefilled plates contain all necessary extraction reagents, plates and tip combs; ready to be used on most automatic nucleic acid extraction instruments/liquid handlers on the market (e.g. Thermo Kingfisher, Tecan, Hamilton, Beckman Biomek, and our own automatic extraction instruments, etc.).

Compatibility with a Variety of Automatic Nucleic Acid Extraction Instruments



Prefilled plates available for most automatic nucleic acid extraction instruments on the market.

Magnetic Bead Core Technology for High Throughput & Automatic Solutions

IVD Manufacturer SINCE 2010

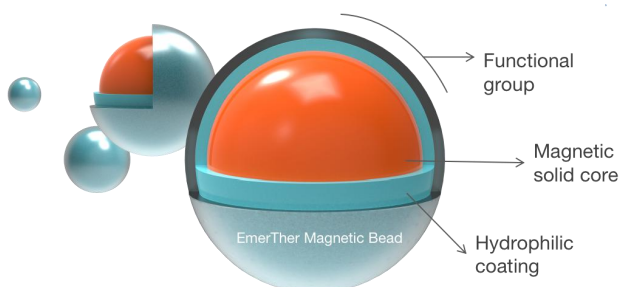
- Nucleic acid extraction
- Protein purification
- Nano-magnetic beads
- Automatic nucleic acid/protein purification instruments

Founded in 2010, the EmerTher Company is an IVD manufacturer specialized in the development and manufacture of nano-scale superparamagnetic beads and related products for biomedical applications.

We provide a number of high-quality, cost-effective products and ready-to-use solutions for biological sample collection, nucleic acid extraction, and protein purification, including:

- 3 viral transport media (non-inactivated; inactivated; inactivated without guanidine) and 3 swabs
- 20+ magnetic bead-based nucleic acid extraction kits
- 6 protein purification magnetic beads
- 6 functionalized magnetic beads
- 3 automatic nucleic acid extraction instruments
- 4 manual magnetic separators

With advanced technologies in nano-scale superparamagnetic bead products and *in vitro* diagnosis, we have helped our customers worldwide to implement automatic nucleic acid and protein extraction/purification procedures in their labs and customized products with high flexibility to meet their special needs.



EmerTher® Magnetic Nucleic Acid Extraction Reagent



**EmerTher®
EmagPure-32A6**



EmerTher® EmagPure-96 Plus