

# EmerTher® Esmart-M96s Magnetic Bead Extractor 96 Pin (20mm)

Transfer magnetic beads from 96 wells in 5 sec

Manual procedure with automatic efficiency



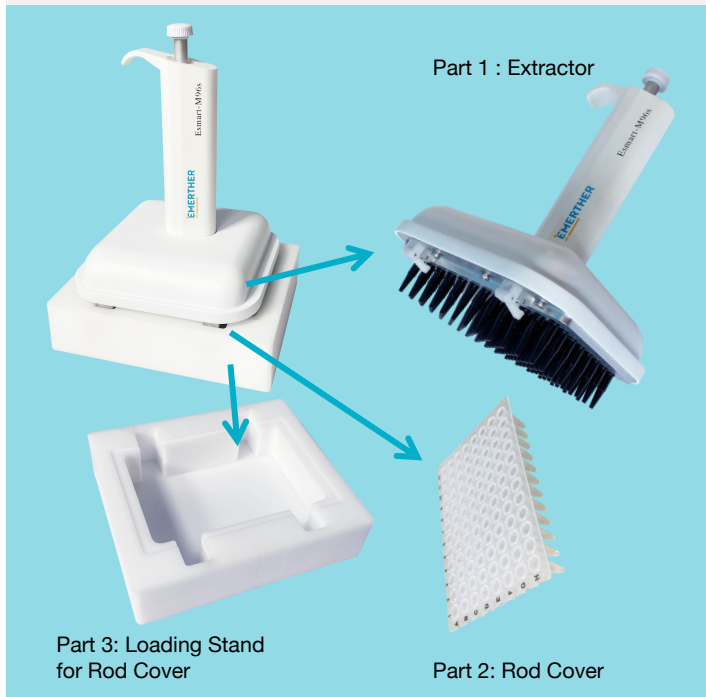
Light weight, portable, no battery required

The Magnetic Bead Extractor, Esmart-M96s, was designed to simplify the process of transferring superparamagnetic beads between 96-well plates, improving nucleic acid purification and extraction efficiency when automatic extraction is not an option. The Esmart-M96s extractor effectively eliminates the traditional multiple pipetting steps required for washing and eluting biological samples.

The Extractor works by attaching a standard PCR plate over its 96 magnetic rods. The PCR plate serves as a sterile barrier (rod cover) between the magnetic beads and magnetic rods. When the extractor attached with the rod cover is gently inserted into a 96-well plate containing biological samples with magnetic beads in suspension, the magnetic beads are attracted by the magnetic rods and adsorbed securely to the tips of the rod cover. This allows for easy and quick transfer of the magnetic beads bound with biologic molecules from one solution to another solution. The beads can be easily released into the new solution by simply detaching the rod cover from the Esmart-M96s extractor. The strong magnetic force of the Esmart-M96s extractor ensures effective magnetic beads adsorption with no beads loss during the sample extraction/purification process.

## Product Information

Esmart-M96s



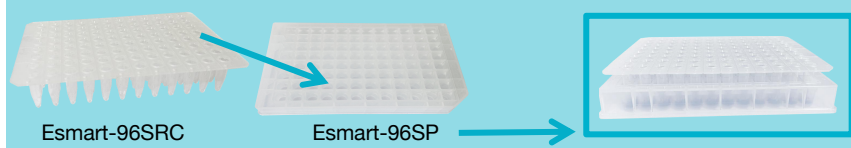
### 【Specifications】

|                |  |
|----------------|--|
| Components     | Part 1 :Extractor<br>Part 2: Rod Cover<br>Part 3: Loading stand for Rod Cover  |
| Specifications | Extractor: 122mm × 123mm × 183 mm<br>Magnetic rod length: 20 mm<br>Rod cover size: 122 mm × 80 mm × 22mm<br>Loading stand: 125mm × 135mm × 35 mm |
| Weight         | Extractor : 850g ± 50g<br>Package: 1500g   |
| Materials      | high-intensity magnetic rods, plastic handle, metal plate  |

### WARNING!!!!

Be advised that the Magnetic Bead Extractor has strong magnetic fields. People with pacemakers should not get closer than 24 inches.

### 【Accessories】

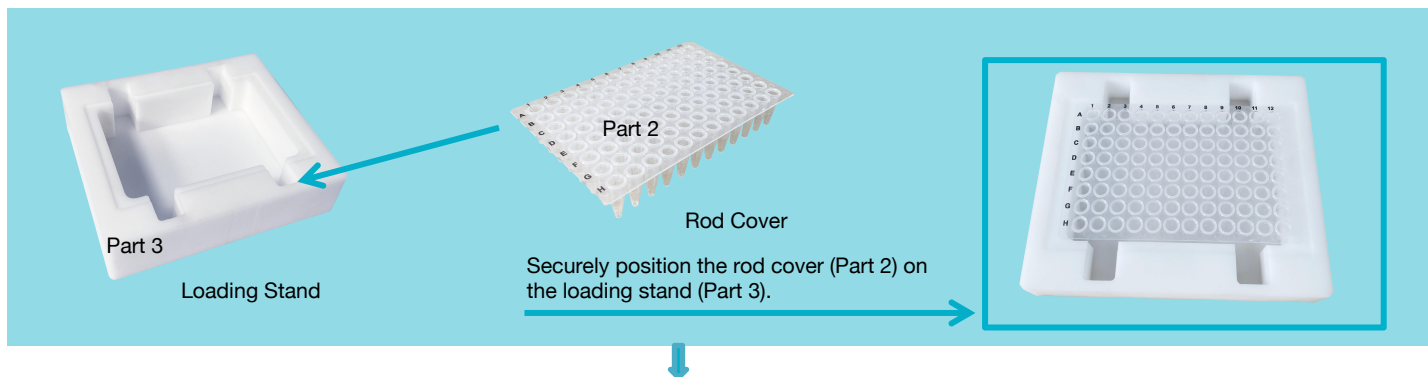


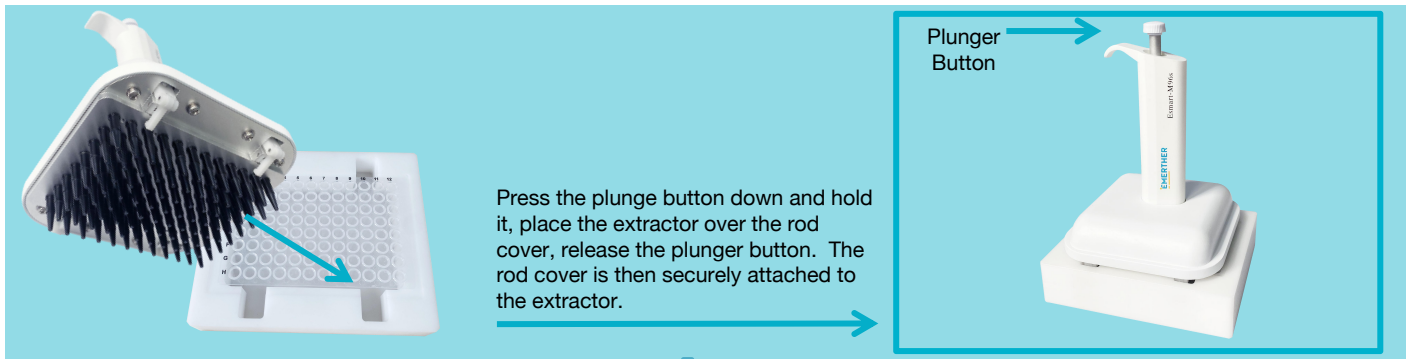
96 Shallow PCR Plate Rod Cover (Esmart-96SRC)  
96-well Shallow Plate (Esmart-96SP)

Accessories ( Sold separately )

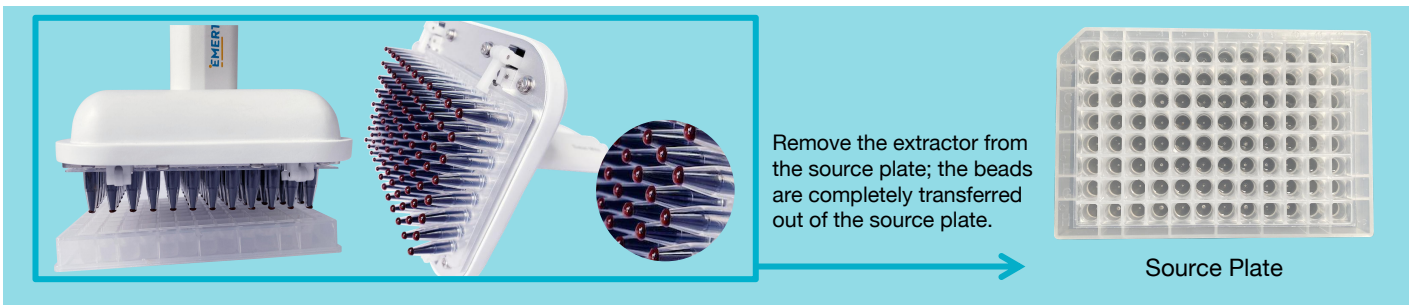
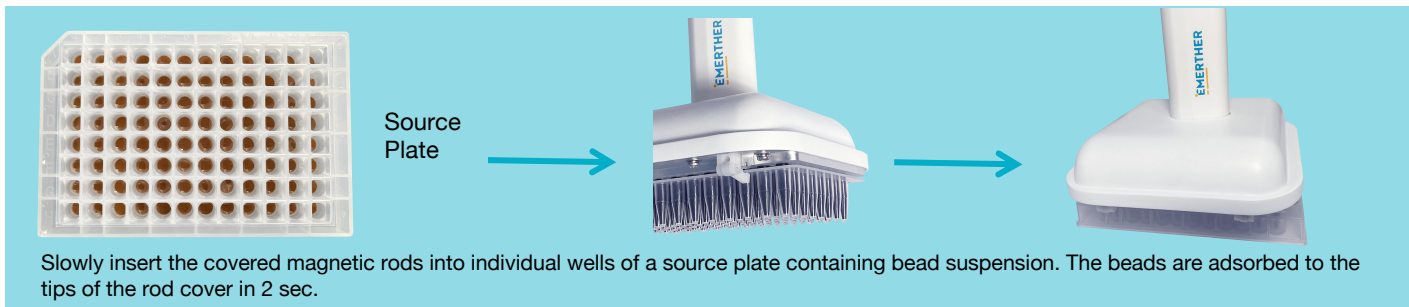
## Procedure

1. Load the rod cover.





2. Move magnetic beads from source plate to destination plate.



## EmerTher® Magnetic Beads -- Recommended for Use with Esmart



### Magnetic PCR Product Purification Kit

#### 【Introduction】

EmerTher Magnetic PCR Product Purification Kit is intended for fast and simple purification of PCR products (> 100 bp). DNA fragments from PCR reactions selectively bind to EmerTher's unique superparamagnetic beads so that PCR by-products, such as primers, dimers, enzymes, unincorporated dNTPs and other contaminants, are removed during washing steps. Highly purified DNA is then eluted with low salt elution buffer or water and can be used directly for downstream applications, including sequencing (Sanger and next-generation sequencing), restriction digestion, *in vitro* transcription, and other subsequent experiments.

#### 【Product Features】

- Completely removal of primers to avoid the interference of primers on sequencing
- Completely removal of proteins and dNTPs
- High recovery of PCR products (> 100 bp): 75-95%
- No centrifugation or filtration

### Magnetic DNA Size Selection Kit

#### 【Introduction】

EmerTher Magnetic DNA Size Selection Kit is used to separate and enrich DNA fragments according to the length. The kit contains superparamagnetic nanoparticles, which are specially coated to enable strong binding to DNA fragments. Specific DNA fragments at a certain length range can be purified simply using magnetic separation, avoiding time-consuming and laborious gel extraction and column-based purification.

#### 【Product Features】

- High-speed: Complete separation and enrichment of DNA fragments according to length within 20 min
- Convenience: Use different volume of DNA binding magnetic beads to separate specific DNA fragments at a certain length range
- The range of DNA fragments to be separated: 100bp-2kb
- Interference-free: remove primers, dimers and other interference materials before sequencing.

#### 【Components】

|                                     |  |                     |                       |
|-------------------------------------|--|---------------------|-----------------------|
| PCR Product Purification Beads      | DF02001 (100 preps)                        | DF02002 (500 preps) | DF02003 (10000 preps) |
|                                     | 4.5 mL                                     | 25 mL               | 450 mL                |
| Magnetic DNA Size Selection beads   | DF03001                                    | DF03002             | DF03003               |
|                                     | 5 mL                                       | 50 mL               | 250 mL                |
| Wash Solution (prepared by user)    | 70% ethanol                                |                     |                       |
| Elution Solution (prepared by user) | TE buffer (pH 7.5-8.5) or H <sub>2</sub> O |                     |                       |

#### 【Storage and Expiration】

The product is shipped at room temperature; keep it at 2-8°C for long term storage up to 2 years.

#### 【Device Recommended】

EmerTher® Esmart-M96s:  
96 Pin (20mm) Magnetic Bead Extractor

## Catalog (Retail price)

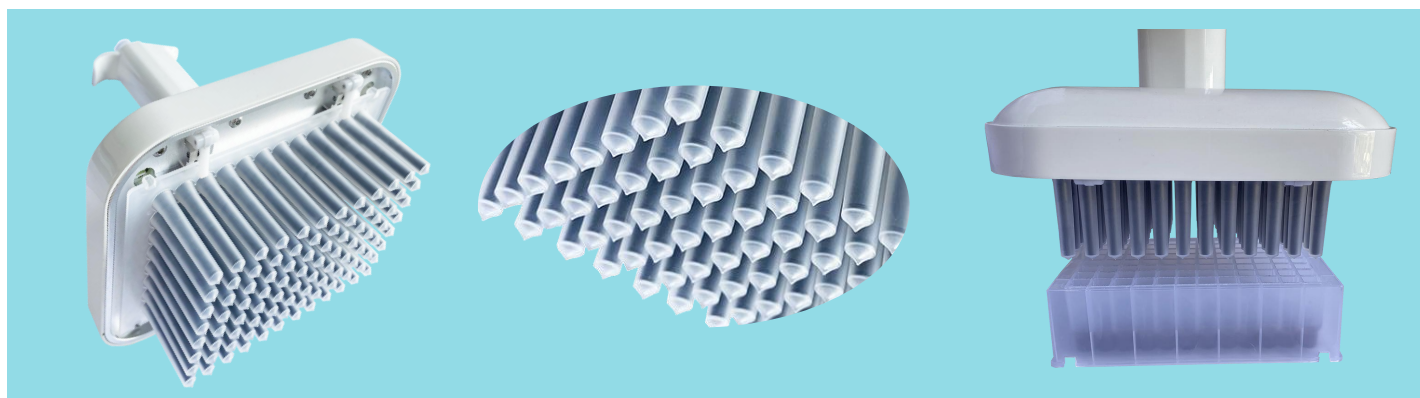
| Product  | Catalog No.                                       | Unit/box     | Price/unit(USD) |  |
|--|---|--------------|-----------------|--|
| Esmart-M96s<br>96 Pin (20mm)<br>Magnetic Bead<br>Extractor | Esmart-M96s                                       | 1            | 1200            |  |
| 96 Shallow PCR<br>Plate Rod Cover                          | Esmart-96SRC                                      | 10           | 35              |  |
| 96-well Shallow<br>Plate                                   | Esmart-96SP                                       | 50           | 150             |  |
| Product  | Catalog No.                                       | Preps/bottle | Price/box(USD)  |  |
| Magnetic PCR<br>Product Purification<br>Kit                | DF02001   | 100 preps    | 50              |  |
|  | DF02002   | 500 preps    | 180             |  |
|  | DF02003   | 10000 preps  | 2970            |  |
| Magnetic DNA Size<br>Selection Beads                       | DF03001   | 5 mL         | 180             |  |
|  | DF03002   | 50 mL        | 680             |  |
|  | DF03003   | 250 mL       | 2500            |  |
| Trade Term   | FOB. Custom charge and shipping cost not included |              |                 |  |

## Additional Products

# EmerTher® Esmart-M96d

## Magnetic Bead Extractor 96 Pin (43mm)

Transfer paramagnetic beads between 96-deep well plates



# 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

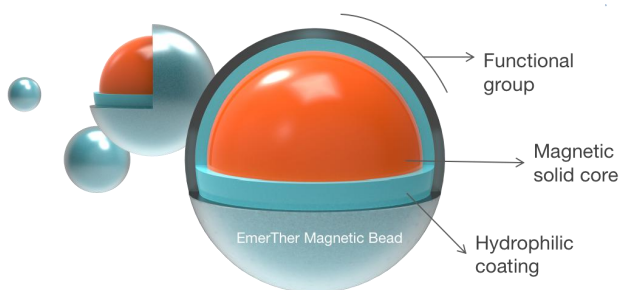


Founded in 2010, the EmerTher Company is an IVD manufacturer specialized in the development and manufacture of nano-scale superparamagnetic beads and related products for biomedical applications.

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®**  
EmagPure-32A6



**EmerTher®** Magnetic Nucleic Acid Extraction Reagent



**EmerTher®** EmagPure-96 Plus