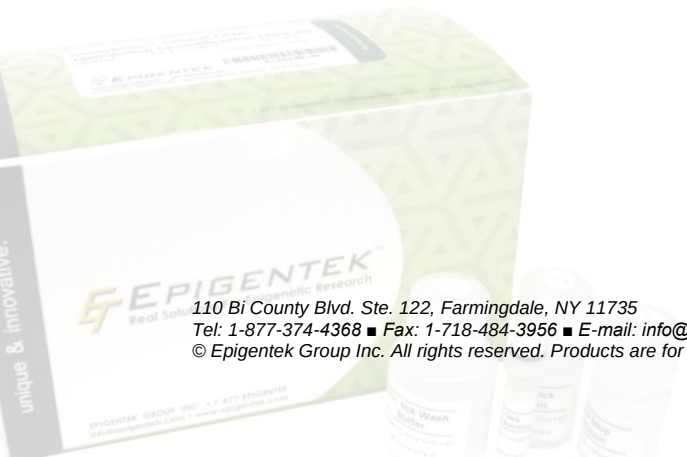
EpiMag™ HT (96-Well) Magnetic Separator

Base Catalog # Q10002

INTENDED USE

EpiMag™ HT (96-Well) Magnetic Separator allows paramagnetic bead precipitation of liquid samples from various 96-Well microplates. It can be used for isolation and purification of nucleic acids and proteins, immunoprecipitation, immunoassays (ELISA), cell sorting, and purification of biomolecules. With use of the HT (96-Well) magnetic separator adapter (included with separator), this magnetic separator can also be used for most PCR microplates.



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PRODUCT CONTENTS

Component	Cat. #Q10002	Storage Upon Receipt
96-Well Magnetic Separator	1	RT
Magnetic Separator Adapter	1	RT
96-Well Microplate	1	RT
Adhesive Cover Film	1	RT
User Guide	1	RT

SHIPPING & STORAGE

The product is shipped at ambient temperature.

Upon receipt: Store this magnet at room temperature and a safe distance from magnetic storage devices such as hard disks and cards with magnetic stripes, such as credit cards. Keep this magnet away from electronic devices and persons with cardiac pacemakers.

GENERAL PRODUCT INFORMATION

Quality Control: EpiMag™ HT (96-Well) Magnetic Separator is tested against predetermined specifications to ensure consistent product quality. Epigentek guarantees the performance of all products in the manner described in our product instructions.

Product Warranty: If this product does not meet your expectations, simply contact our technical support unit or your regional distributor. We also encourage you to contact us if you have any suggestions about product performance or new applications and techniques.

Safety: Suitable lab coat, disposable gloves, and proper eye protection are required when working with this product.

Product Updates: Epigentek reserves the right to change or modify any product to enhance its performance and design. The information in this User Guide is subject to change at any time without notice. Thus, only use the User Guide that was supplied with the product when using that product.

Usage Limitation: The EpiMag™ HT (96-Well) Magnetic Separator is for research use only and is not intended for diagnostic or therapeutic application.

Intellectual Property: The EpiMag™ HT (96-Well) Magnetic Separator and methods of use contain proprietary technologies by Epigentek.

PRODUCT DESCRIPTION

The implementation of twenty-four extremely powerful magnetic rods made of neodymium-iron boron enables fast and easy magnetic separation. Each magnetic rod addresses four wells of the 96-well plate. With this magnetic separator, paramagnetic beads will be firmly pulled to the side of the plate wells, which ensures complete removal of the magnetic beads from the solution by a robot or with a multichannel pipette, minimizing sample loss. This product has the following features:

- **Ultra-Powerful NdFeB Magnets** - allows for the fastest separation times and minimal bead loss.
- **Efficient Particle Washing** - Vertical orientation of the bar magnetic field attracts and suspends the magnetic particles both to the side and up from the bottom of the wells. Pipette tips can be inserted to the bottom of the well, insuring thorough and efficient washing and removal of fluids.
- **Maximum Sample Concentration** - Samples can be efficiently recovered from 10 µl to 2 ml of liquid.
- **Universal Compatibility** – Suitable for most magnetic beads or particles including magnetic iron oxide nanoparticles and magnetic agarose beads (e.g., EpiNext beads, AMPure XP, Axygen, etc). Compatible with all microtiter plates, including standard 96-well plates (0.25 to 0.3 ml wells) and deep well plates (1 to 2 ml) with various well shapes (U-shape, V-shape, and flat bottom). The included adapter allows for use with various skirted and unskirted PCR microplates.
- **Lightweight Handheld Design** - Allows for easy repeated handling.

PROTOCOL OF USE

The working procedure is described as the follows:

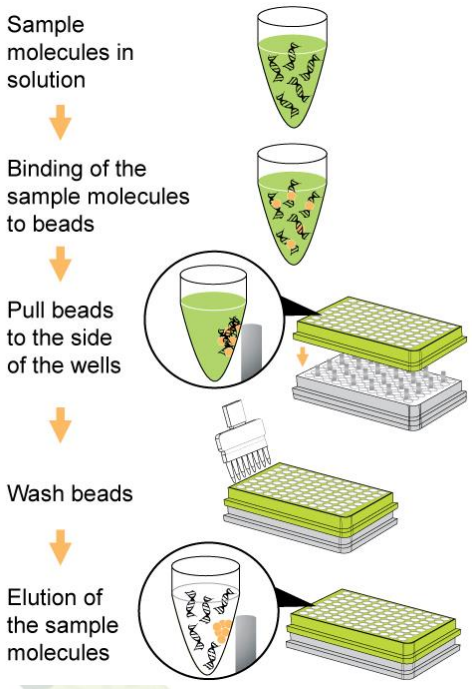

Fig 1. Workflow for using EpiMag™ HT (96-well) Magnetic Separator for sample molecule isolation

Standard or Deep-Well Microplate

1. Add the sample solution into a microplate (if the microplate does not contain sample solution), then add appropriate binding buffer (if necessary) and magnetic beads into the plate for an appropriate incubation time.

2. Place the microplate onto the HT **(96-Well) Magnetic Separator**. The magnetic beads will aggregate to the side or bottom of the well. The time period of complete capture of the beads is dependent on the solution volume and size of the beads, ranging from several seconds to several minutes.

3. Remove the fluid completely with a pipette and wash the beads with appropriate wash solution several times. Leave the plate on the separator for 1-4 min to to ensure optimal removal of any residual fluid.

4. Elute the sample molecules from the beads with appropriate elution buffer.

PCR Microplates

Note: *PCR microplates have narrow wells which increases surface tension and makes removing the excess fluid of the original sample from the beads difficult. For the best results, we recommend transferring the sample solution in the PCR plate into the 96-well microplate included with the separator or a standard microplate.*

If PCR microplates have to be directly used, an HT (96-Well) ***Magnetic Separator Adapter*** *is required (included with the separator). A skirted PCR plate is considered to best fit the separator.*

1. Add the sample solution into a microplate (if the microplate does not contain sample solution), then add appropriate binding buffer (if necessary) and magnetic beads into the plate wells for an appropriate incubation time.

2. Place the adapter onto the HT **(96-Well) Magnetic Separator**. Then, put the PCR onto the adapter.

3. Slightly move the adapter (left or right direction against the separator) to bring the wells close to the magnetic rods. The magnetic beads will aggregate to the side or bottom of the well. The time period of complete capture of the beads is dependent on the solution volume and size of the beads, ranging from several seconds to several minutes.

4. Remove the fluid completely using a pipette and wash the beads with appropriate wash solution several times. Leave the plate on the separator for 1-4 min to ensure optimal removal of any residual fluid.

5. Elute the sample molecules from the beads with appropriate elution buffer.

RELATED PRODUCTS

Beads-based DNA Isolation and Clean-up
P-1063 The EpiNext™ DNA Purification HT System

Sonication Instruments
EQC-1100 EpiSonic™ Multi-Functional Bioprocessor 1100

Q10003 EpiMag™ 96-Well Microplate

DNA Enrichment Reaction

P-1015 Methylamp™ Methylated DNA Capture (MeDIP) Kit
P-1038 EpiQuik™ Hydroxymethylated DNA Immunoprecipitation (hMeDIP) Kit
P-1052 EpiQuik™ MeDIP Ultra Kit
P-2002 EpiQuik™ Chromatin Immunoprecipitation (ChIP) Kit
P-2003 EpiQuik™ Tissue Chromatin Immunoprecipitation (ChIP) Kit
P-2014 EpiQuik™ Plant ChIP Kit
P-2025 ChromaFlash™ One-Step ChIP Kit
P-2026 ChromaFlash™ One-Step Magnetic ChIP Kit
P-2027 ChromaFlash™ High-Sensitivity ChIP Kit

DNA Library Prep

P-1051 EpiNext™ DNA Library Preparation Kit (Illumina)
P-1053 EpiNext™ High-Sensitivity DNA Library Preparation Kit (Illumina)
P-1055 EpiNext™ Post-Bisulfite DNA Library Preparation Kit (Illumina)
P-1059 EpiNext™ DNA Size Selection Kit

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