# invitrogen

## DynaMag<sup>™</sup>-96 Side Skirted DynaMag<sup>™</sup>-96 Side DynaMag<sup>™</sup>-96 Bottom

Catalog nos. 12027, 12331D, 12332D Pub. No. MAN0014604 Rev. Date: September 2015 (Rev. A.0)

### Store at ambient temperature

# **Product description**

DynaMag<sup>™</sup> magnets are designed to provide optimal magnetic separation of Dynabeads<sup>™</sup> magnetic beads from diverse liquid sample matrices. Dynabeads<sup>™</sup> magnetic beads can be used to isolate cells, proteins, nucleic acids, or other biomolecules.

Mix Dynabeads<sup>™</sup> magnetic beads and your sample in a well of a 96-well plate, allowing the beads to bind the target biomolecules within a few minutes. When a magnetic field is applied to the plate, the beads are gently and rapidly attracted to the walls or bottom of the well, along with the bead-bound biomolecules. With the beads pulled to the walls or bottom of the wells, it is easy to remove the supernatant. Liquid can be added and removed either manually or by an automated liquid handling robot. When the magnetic field is removed, the Dynabeads<sup>™</sup> magnetic beads can be resuspended in the liquid. In the absence of a magnetic field, the superparamagnetic Dynabeads™ magnetic beads exhibit no residual magnetism. This superparamagnetic characteristic enables the beads to float freely and individually in the sample volume and subsequently to be collected at the walls or bottom of the well via magnetic field for sample separation or buffer exchange.

With strong magnets and great functionality, the DynaMag<sup>™</sup> magnets outperform all other magnetic separators, providing faster and more efficient magnetic separation. See **thermofisher.com/magnets** for the full magnet range.t



## DynaMag<sup>™</sup>-96 Side

Cat. no. 12331D

- Beads collect at the side of each well.
- Working volume: 5–200 μL.

#### Holds:

- PCR Strips
- 96-well PCR-plates\*
  - ▶ Half-Skirted (200 µL)
  - Non-Skirted
- This plate magnet features 7 bar magnets with a hard plastic top to ensure a stable fit for 96-well PCR-plates. The magnet collects the Dynabeads<sup>™</sup> magnetic beads at the side of the wells. With the beads concentrated at the side of the wells, all residual fluid can be removed without disturbing the bead pellet. The DynaMag<sup>™</sup>-96 Side magnet has an extra column (13 in total) to enable sample mixing by simply shifting the 96-well plate back and forth from the right-most position to the left-most position. Each shift in position causes the Dynabeads<sup>™</sup> magnetic beads to alternate between opposite walls of the well. Continuous reciprocal shifting results in continuous mixing. The benefits of this type of mixing are:
  - No physical interaction with the liquid volume during mixing
  - Reduced chance of contamination
  - ▶ Reduced sample degradation
- Reduced risk of volume loss
- When used in combination with the DynaMag<sup>™</sup>-96 Bottom magnet on an automation platform, these magnets allow for significant volume change within a workflow:
  - High wash volumes
    (DynaMag<sup>™</sup>-96 Side or DynaMag<sup>™</sup>-96 Side Skirted)
  - Low elution volumes
    (DynaMag<sup>™</sup>-96 Bottom)



# DynaMag<sup>™</sup>-96 Side Skirted

#### Cat. no. 12027

- Beads collect at the side of each well.
- Working volume 5–200 μL.

#### Holds:

- 96-well skirted PCR-plates\*
- Compatible with culture plates
  - ▶ 96-well round bottom plates
  - ▶ 96-well flat bottom plates
  - ▶ 6-, 12-, and 24-well plates
  - Not recommended for use with 48-well plates
- This plate magnet features 6 bar magnets. The magnet collects the Dynabeads<sup>™</sup> magnetic beads at the side of the wells. With the beads concentrated at the side of the well, all residual fluid can be removed without disturbing the bead pellet. This magnet can be used for mixing the same way described for the DynaMag<sup>™</sup>-96 Side magnet. When used in combination with the DynaMag<sup>™</sup>-96 Bottom magnet on an automated platform, these allow for significant volume changes within a workflow:
- High wash volumes
  (DynaMag<sup>™</sup>-96 Side or DynaMag<sup>™</sup>-96 Side Skirted)
- Low elution volumes
  (DynaMag<sup>™</sup>-96 Bottom)



## DynaMag<sup>™</sup>-96 Bottom

#### Cat. no. 12332D

- Beads collect at the bottom of each well.
- Working volume 5–200 µL.

#### Holds:

- PCR strips
- 96-well PCR style plates\*
  - ► Half-Skirted (200 µL)
  - Non-Skirted
- This plate magnet features 96 round magnets (one magnet centered at the bottom of each well) to ensure identical sample handling at each position. The magnet pulls the Dynabeads<sup>™</sup> magnetic beads to the bottom of each well, allowing for elution in very small volumes. When used in combination with theDynaMag<sup>™</sup>-96 Side or DynaMag<sup>™</sup>-96 Side Skirted magnets an automated platform, these magnets allow for significant volume changes within a workflow:
  - High wash volumes
    (DynaMag<sup>™</sup>-96 Side or DynaMag<sup>™</sup>-96 Side Skirted)
  - ► Low (5 µL) elution volumes (DynaMag<sup>™</sup>-96 Bottom)

\* Because plates may vary, users should test their plates for compability.

# Precautions

These magnets contain very strong permanent magnets. People wearing a pacemaker or any other medical magnetized implant should not use this product unless advised by a health professional; the implant could be affected or damaged by exposure to a strong magnetic field. Keep tools and objects that could be damaged by the magnetic field out of the working area. This includes, but is not restricted to, credit cards and other products containing magnetic recording devices. Keep away from delicate instruments, watches, electronic equipment, displays and monitors. The magnet may attract steel or other magnetic material with high mechanical forces. Take care during handling. Avoid contact between two magnets. Do not pull the magnets apart if contact has been made; twist off to prevent damage to the unit or fingers. The Health and Safety Officer should take all necessary steps and full responsibility to ensure that the precautions and statements are followed and adhered to.

### **Cleaning and disinfection**

The following materials are recommended for cleaning purposes. Spray and/or wipe the DynaMag<sup>™</sup> units either with 70% isopropyl alcohol, 1% sodium hypochlorite solution (bleach), or 0.1N HCl solution. Do not submerge in aqueous solutions and avoid prolonged exposure to water or aqueous solutions. Clean with a damp cloth and mild detergent when exposed to harsh solvents.

IMPORTANT: Do not autoclave DynaMag<sup>™</sup> magnets.

### Storage and stability

The magnets contains high-energy Neodymium permanent magnets. Magnetic strength will not diminish significantly during the lifetime of the product. Do not use the magnets above 50°C (122°F) and store in a cool, dry environment. Avoid prolonged exposure of the magnets to direct sunlight or artificial UV light as the surface material may become brittle.

## Important licensing information

This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

Manufactured by Life Technologies AS, Norway. Life Technologies AS complies with the Quality System Standards ISO 9001:2008 and ISO 13485:2003.

## Limited Product Warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at **www.lifetechnologies.com/termsandconditions**. If you have any questions, please contact Life Technologies at **www.lifetechnologies.com/ support**.

SPEC-06838

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