

# Dynabeads® MyOne™ SILANE

Catalog nos. 37002D, 37005D

Store at 2 °C to 8 °C

Rev. Date: June 2012 (Rev. 003)

## Product Description

Dynabeads® MyOne™ SILANE are uniform, monosized ferrimagnetic beads, 1 µm in diameter. The beads are composed of highly cross-linked polystyrene with evenly distributed magnetic material.

The beads are further coated, enclosing the iron oxide inside the beads and presenting a bead surface with optimized silica-like chemistry. The increased magnetic strength of these beads ensure rapid magnetic mobility and efficient isolation of nucleic acids (DNA/RNA). The beads also feature a low sedimentation rate and favorable reaction kinetics, making them particularly suited for automated assays.

Alternative particles from other suppliers often have a random size range distribution, surface area, and binding capacity. This could compromise the reproducibility of your results. Dynabeads® MyOne™ SILANE hold reputable high standards with respect to monodispersity and reproducibility.

Dynabeads® MyOne™ SILANE are manufactured under validated production processes, and can be supplied in bulk quantities on an OEM-basis (fig. 1).

## Principle

Dynabeads® MyOne™ SILANE provide an excellent tool for highly predictable and consistent isolation of nucleic acids from biological samples, following a simple separation protocol.

An appropriate lysis buffer is first added to the sample, followed by incubation with Dynabeads® MyOne™ SILANE. The beads with bound DNA/RNA are easily pulled to the side of the test tube by

applying a magnetic field, and unbound material is removed by aspiration. The magnetic separation also facilitates simple washing and elution of the isolated nucleic acids. The protocol and buffer systems used should be optimized relative to your specific sample type and target material (viral/bacterial/genomic DNA/RNA, etc.). Dynabeads® magnetic separation technology is easily adapted to automated liquid handling platforms. The protocol can be scaled up or down to suit specific needs.

For further information and specific protocols for isolation of nucleic acids, contact Life Technologies at: [www.lifetechnologies.com](http://www.lifetechnologies.com).

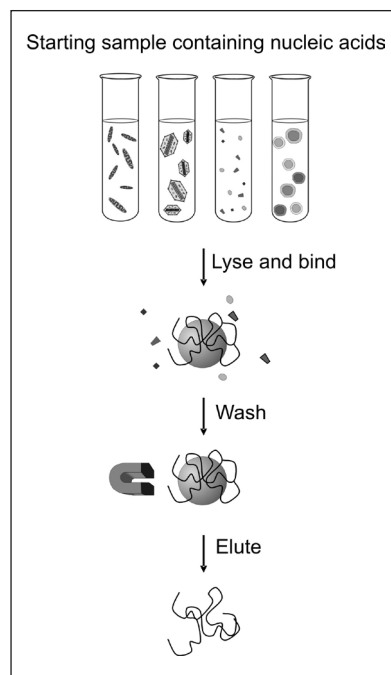


Figure 1: Illustration showing magnetic separation of nucleic acids from a variety of biological samples using Dynabeads® MyOne™ SILANE.

## Related Products

The Dynabeads® SILANE viral NA kit (Cat. no. 37011D) contains Dynabeads® MyOne™ SILANE and specific buffers optimized for sensitive isolation of viral DNA/RNA from human serum/plasma samples.

The Dynabeads® SILANE genomic DNA kit (Cat. no. 37012D) contains Dynabeads® MyOne™ SILANE and specific buffers optimized for capture of genomic DNA from human whole blood. A comprehensive range of Dynabeads® for specific capture of nucleic acids is available, across different bead sizes and surface functionalities. Some Dynabeads® are pre-coated with streptavidin, allowing for capture of biotinylated molecules in a wide variety of protocols. Other Dynabeads® have a specific surface chemistry for coupling of nucleic acids (e.g hybridization probes/primers) and/or other ligands. Dynabeads® products are sold off-the shelf, and also supplied in bulk quantities on an OEM-basis.

## General Information

The many unique benefits, superior quality, and unsurpassed reproducibility of all Dynabeads® are renowned in the IVD market. Based on our extensive knowledge and intellectual property (IP) we are able to work with a wide range of customers and partners to develop and validate optimized Dynabeads®, buffers and protocols that meet their specific target requirements (e.g. capture of specific virus), downstream application and regulatory requirements.

## Storage and Stability

When stored in unopened vials at 2°C to 8°C, the product is stable until the expiry date printed on the label. Precautions should be taken to prevent bacterial contamination of opened vials.

## Description of Materials

Dynabeads® MyOne™ SILANE have a high surface area (~20 m<sup>2</sup>/g), a silica-like surface chemistry (silanol groups) and a diameter of 1 µm (CV ≤5%). The beads are supplied at a concentration of 40 mg/mL, in a total volume of 5 mL (Cat. no. 37002D) or 100 mL (Cat. no. 37005D). The beads are supplied in water, containing 0.02% sodium azide as a preservative. The beads should be resuspended (e.g. vortex) to a homogenous suspension prior to use. Certificate of Analysis/Compliance is available upon request.

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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](http://www.lifetechnologies.com/termsandconditions). If you have any questions, please contact Life Technologies at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

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