Silica Mag Beads NH2 (500 nm)

Description

TargetMol Silica Magnetic Beads are specifically designed for the extraction and purification of nucleic acids. The bead surface is composed of high-purity silica, enriched with silanol groups (hydroxyl) or carboxyl groups. Under high-salt and low-pH conditions, these beads achieve efficient and specific binding with nucleic acid molecules through hydrophobic interactions, hydrogen bonding, and electrostatic interactions. Simultaneously, they exhibit minimal adsorption of proteins and other impurities, enabling the rapid separation and purification of nucleic acids from complex biological samples. The product features a simple operation process and high safety, making it suitable for both manual operations and automated platforms, particularly for high-throughput nucleic acid extraction applications.

Product Information

Product Name	Silica Mag Beads NH2 (500 nm) (C0230)
Mean Particle Size	500 nm (Monodisperse)*
Surface Group	~40 emu/g
Magnetic Core	Fe_3O_4
Magnetic Shell	Silica
Magnetic Type	Superparamagnetic
Saturation Magnetization	50.11 emu/g
Specific Surface Area	20.01 m^2/g
Concentration	10 mg/mL
Storage Solution	20% Ethanol

*Hydrated average particle size, determined by Malvern Nano.

Product Features

1. Excellent superparamagnetism and rapid magnetic response: Effectively shortens operation time.
2. Superior dispersibility and resuspension performance: Beneficial for improving nucleic acid binding efficiency and recovery rate.
3. Stable physical and chemical properties: Helps ensure the reproducibility and reliability of experimental results.

Applications

1. Purification and recovery of PCR products.
2. Extraction and purification of plasmid DNA.
3. Separation and extraction of viral nucleic acids.
4. Extraction of genomic DNA from various samples including blood, tissue, plants, and microorganisms.
5. Magnetic bead-based protein purification.

Storage

4°C, 2 years.

Precautions

1. Avoid freezing, drying, or high-speed centrifugation of the magnetic beads.
2. To minimize bead loss, the duration of each magnetic separation should not be less than 1 minute.
3. Before taking beads from the storage tube, shake thoroughly to ensure uniform suspension. Avoid bubble formation during operation.
4. The product is for R&D use only, not for diagnostic procedures, food, drug, household or other uses.
5. Please wear a lab coat and disposable gloves.

TargetMol US

sales@targetmol.com (781) 999-4286 www.targetmol.com

34 Washington Street, Suite 220, Wellesley Hills, MA 02481

TargetMol EU

sales@targetmol.com +43(0)676/786025 www.targetmol.com

Hafenstraße 47-51，4020 Linz，Austria