
Product Specification

Product Name: Amino-Activated MagPoly Beads

Product Code: MAGP044 / MAGP045

PRODUCT DESCRIPTION:

Amino-Activated MagPoly Beads are superparamagnetic beads featuring surface-exposed amino functional groups. Researchers can tailor this pre-activated medium into specialized affinity matrices, enabling the rapid, streamlined, one-step purification of target molecules from heterogeneous biological samples.

Characteristics of Amino-Activated MagPoly Beads:

Item	Description
Matrix Spherical:	Polymer Magnetic Beads
Particle Size (µm):	1
Beads Concentration:	10 mg/ml
Storage Solution:	100% Isopropanol
Storage Temperature:	- 20°C

COUPLING PROCEDURE

1. Buffer Preparation

Water and chemicals used for the buffer preparation should be of high purity. It is recommended to filter the buffers by passing them through a 0.22 or 0.45µm filter before use.

Cleaning Buffer: 1 mM HCl

Coupling Buffer: 0.1M MES, pH 4.5

Wash Buffer 1: 0.1M NaAc, 0.5M NaCl, pH 3.0

Wash Buffer 2: 0.1M Tris-HCl, 0.5M NaCl, pH 8.0

Storage Buffer: 20 mM Sodium Phosphate, 20% Ethanol, pH 8.0

2. Sample Preparation

It is recommended to filter the sample solution by passing them through a 0.22 or 0.45µm filter before use. The sample should be dissolved in **Coupling Buffer** with a concentration of approximately 5-10 mg/ml. If the sample is insoluble, add 50% Dioxane or Ethylene Glycol and adjust the pH to 4.5 - 6.0 using pH Indicator Strips.

3. Ligand Coupling

- 1) Transfer an appropriate amount of the **Amino-Activated MagPoly Beads** into a clean microcentrifuge tube.
- 2) Place the tube on a Magnetic Rack to sequester the beads. Remove and discard the supernatant (Storage Buffer).
- 3) Resuspend the beads in the Cleaning Buffer, then use the Magnetic Rack to collect the beads at the tube wall and discard the supernatant. Repeat this washing step two more times, then once more with the Coupling Buffer.
- 4) Transfer the sample prepared in Section 2 to the cleaned **Amino-Activated MagPoly Beads**
- 5) Introduce EDC by adding the solid powder form directly into the solution, or dripping in a high-concentration solution to reach a final concentration of 0.1M. Ensure any stock solution is pH-adjusted before addition.

- 6) Incubate the mixture on a column or rotating mixer for 2 – 24 hours at temperatures between 4 – 25°C.
- 7) Collect the beads and discard the blocking buffer. Wash three times with deionized water with reference to Step 3.
- 8) Perform a sequential wash cycle (Wash Buffer 1 → Deionized Water → Wash Buffer 2 → Deionized Water) twice, with reference to Step 3.
- 9) Store the final product in an equal volume of Storage Buffer at 2–8°C.

RELATED PRODUCTS

Product Name	Product Code	Size
Amino-Activated MagPoly Beads	MAGP044	1 ml
	MAGP045	5 ml