

[Cat. No.] TA-1011-1

## Introduction

Bioneer AccuNanoBead Amine Magnetic NanoBeads are uniform, silica-based paramagnetic beads coated with high density of primary amine functional groups on the surface. The beads are used to covalently conjugate primary epoxy or carboxy- containing ligands. The simple and efficient collection in magnetic fields, such as *MagListo™* Magnetic Separation Rack, allows for easy washing and removal of supernatant after coupling.

## Features & Benefits

- Covalently couples with high efficiency
- Stable covalent bond with low levels of ligand leakage
- Produces reusable immunoaffinity matrices
- Low nonspecific binding
- Immobilize protein or peptide
- Application: Purification for Antibody Protein/Peptide

## Components

Components	Amount
AccuNanoBead™ Amine Magnetic NanoBeads	0.5 g

\* **Note:** For research use only. Not for use in diagnostic or therapeutic procedures.

## Materials to be Prepared by User

Conjugation Buffer:	PBS buffer, pH 8.0 (adjust with NaOH) or 0.1 M sodium phosphate, pH 8.0
Blocking Buffer	0.5 M Tris-HCl, pH 8.0
Storage Buffer	PBS, pH 7.4 including 0.1 % Sodium azide and 0.02 % Tween 20

\* **Note:** Buffer could be changed depending on user's needs.

## Specifications

AccuNanoBead™ Amine Magnetic NanoBeads	
Composition	Amine Magnetic NanoBeads
Binding capacity	DMT Loading: $\geq 6$ $\mu\text{mol/g}$ of beads
Size	Average 400 nm
Concentration	0.5 g(Solid)

## Storage

Store at room temperature.

This product can be stable for 3 years at room temperature (25°C).

## Expired date

Indicated on the label.

## Precautions

- Do not vigorously vortex *AccuNanoBead™* Amine Magnetic NanoBeads.
- An exact protocol may need to be optimized by the user

## Online Resources



Korean



English

Visit our **product page** for additional information and protocols

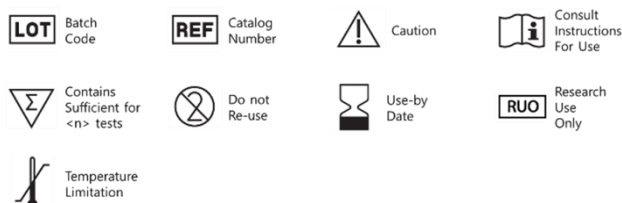
## Ordering Information

Description	Cat. No.
AccuNanoBead™ Amine Magnetic NanoBeads	TA-1011-1


## Notice

BIONEER corporation reserves the right to make corrections, modifications, improvements and other changes to its products, services, specifications or product descriptions at any time without notice.

## Explanation of Symbols



**Experimental Procedures (The protocols are scalable and can be optimized)**

Steps	Procedure Details
 <p><b>Coupling Method</b></p>	<ol style="list-style-type: none"> <li>1. Transfer Amine Magnetic Nanobeads to 1.5ml tube</li> <li>2. Washing several time using the conjugation Buffer(PBS buffer, PH8.0).</li> <li>3. Discard the washed buffer using a magnet</li> <li>4. Add the protein 1 to 10mg of protein per bead 1g.</li> <li>5. React for 20 ~ 24 hours at room temperature using a rotator. (Depending on the stability of the protein, it can be carried out for 24 hours at 4 ° C. Reactivity is good at room temperature due to chemical reaction</li> <li>6. Remove the reaction solution by using magnet, replace with blocking buffer (0.5 M Tris-HCl, pH 8.0 or 0.5 M Ethanolamine, pH 8.0) and react at 4°C for 12~16 hours</li> <li>7. Remove the reaction solution by using magnet, washing well with PBS buffer.</li> </ol>