[Cat. No.] TA-1016-1

Introduction

- Bioneer AccuNanoBead Biotin Magnetic Nanobeads are uniform, silica-based paramagnetic nanoparticles are coupled with a biomolecule, such as Biotin, and are utilized in the magnetic separation and isolation of avidin and streptavidin-labeled components. The particles have a large surface area with high capture efficiencies.

Features & Benefits

- Bioneer AccuNanoBead Biotin Magnetic Nanobeads are densely coated with Biotin. Nanobeads are utilized in the magnetic separation of avidin and streptavidin-labeled molecules. Biotin magnetic beads are stable, pre-blocked beads with high binding capacity that provide rapid and efficient biomolecule purification from complex samples. Design of Bioneer AccuNanoBead Biotin Magnetic Nanobeads enables faster binding kinetics, High yield, purity, and quality in many biomedical and research applications

Components

Components	Amount
AccuNanoBead™ Biotin Magnetic NanoBeads	0.5 g/ 25ml In DW

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

Materials to be Prepared by User

Magnetic Separator	
Binding/Wash Buffer	TBS - 0.05% Tween 20 detergent
Elution Buffer	8 M guanidine-HCL, pH 1.5
deionized water	

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

Specifications

AccuNanoBead™ Biotin Magnetic NanoBeads	
Composition	**Biotin Magnetic NanoBeads**
Binding capacity	HABA/Avidin Loading: ≥7 umol/g of beads
Size	Average 400 nm
Concentration	0.5 g/ 25ml

Storage

Store at 2~6°C. This product can be stable for 3 years at 2~6°C

Expired date

Indicated on the label.

Precautions

- Do not vigorously vortex *AccuNanoBead*™ Biotin 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

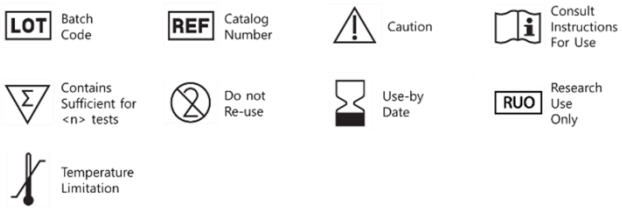
Ordering Information

Description	Cat. No.
AccuNanoBead™ Biotin Magnetic NanoBeads	TA-1016-1

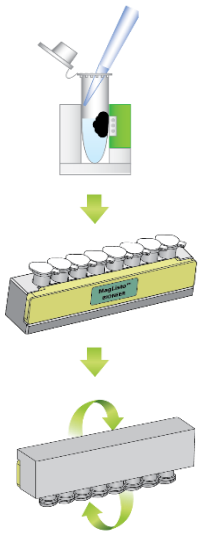
Notice

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
1	**Procedures** 	1. Add 100 µL (0.5 mg) of beads to 1 mL of binding buffer in each tube to wash particles 2. Magnetically separate using a magnetic separator for 2 minutes or until the supernatant is clear 3. Remove the supernatant and wash once more by adding 1 mL of binding buffer 4. Repeat step 2 and remove the supernatant. 5. Resuspend beads by adding 450 uL of binding buffer 6. Add 50 µL of serum or cell culture supernatant to the beads 7. Gently mix using vortex or rotator for 30 minutes. 8. Magnetically separate using a magnetic separator for 2 minutes or until the supernatant is clear. 9. Remove supernatant and wash with 0.5 mL Binding/Wash buffer to remove unbound proteins 10. Repeat steps 8 and 9 once more. Remove supernatant. 11. Add 100 µL of elution buffer to beads and mix well. 12. Incubate at room temperature for 10 minutes with occasional gentle mixing or vortex. 13. Desalt of dialyze the eluted sample to put them into a suitable buffer.