# Magou

#### Cat.No. MF-STA-3000

## **Qbeads-Streptavidin**

## Product description

Qbeads-Streptavidin (Qbeads-STA)is designed as a rapid and simple tool forimmunoprecipitation, purification/depletion assay, and otherapplications. Biotinylated molecules, such as nucleic acids, peptides andproteins can bind toQbeads-STA easily. By applying magnetic attraction, Qbeads-STA-molecules complex will betemporarilyimmobilized at tube wall,so the other parts in supernatant can be removed easily and efficiently. The binding capacity of Qbeads-STA is about12nmole biotin per mL.



## Material supplied

Qbeads-STA provides  $Fe_3O_4$  beads coated with dextran of anaverage ~1 µm in diameter. Streptavidin, about 60 kDa, is coupled covalently to dextran. Qbeads are supplied in phosphate buffered saline, pH 7.4, containing 0.02% Tween-20, 0.09% sodium azide and 10% glycerol.

## Additional material required

Qbeads-STA Washing Buffer

Target molecules	Washing Buffer
Nucleic acids	TE buffer
Proteins/ peptides/ others	PBS buffer (pH 7.4) with 0.02% Tween 20

- Magntic stand: Magdorf(MDF-08) is suggested for the best performance
- Tilt rotation device or vortexer
- Eppendorf tubes &pipett

#### <u>Storage</u>

Please keep the reagent at  $2-8^{\circ}$ C. The validity is warranted for 6 months.

#### Protocol

#### Preparation Qbeads-STA for use

- 1. Resuspend the Qbeads-STA thoroughly by pipetting or vortexing the vial.
- 2. Transfer adequatevolume of Qbeads-STA to a clean tube.
- 3. Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
- 4. Discard the supernatant by aspiration with a pipette.
- 5. Remove the tube from the magnetic stand.
- 6. Add 200 µLWashing Buffer and resuspend the beads by pipetting.
- 7. Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
- 8. Discard the supernatant, and then remove the tube from the magnetic stand.
- 9. Repeat steps 6-8 twice.
- 10. Ready for Binding of biotinylated molecule.

**NOTE**: Qbeads-STA contains 0.09% NaN<sub>3</sub>, so we strongly recommend that wash the beads at least three times before use.

#### Binding of biotinylated molecule

- 11. Add adequate amount biotinylated molecule sample to the tube from step 10.
- 12. Incubate with tilt rotation for 30 minutes at room temperature.
- 13. Add 200 µLWashing Buffer and resuspend the beads by pipetting.
- 14. Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
- 15. Discard the supernatant, and then remove the tube from the magnetic stand.
- 16. Repeat steps 13-15 for three times to remove unbound molecules.
- 17. Finally resuspend the beads-biotinylated molecule complex inWashing buffer.

#### Elution of biotinylated molecule

- 18. For elution of biotinylated-nucleic acids from Qbeads\_STA.
  - 18.1 Remove Washing buffer from the tube.
  - 18.2 Add 200 μL 10 mM EDTA (pH 8.2) solution with 95% formamide in the tube, and then resuspend the Qbeads\_STA evenly.
  - 18.3 Incubate the tube at 65°C for 5 mins.
  - 18.4 Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
  - 18.5 Collect the supernatant to a new tube.
- 19. For elution of biotinylated-protein from Qbeads\_STA.
  - 19.1 Remove Washing buffer from the tube.
  - 19.2 Add 200  $\mu L$  Washing buffer (PBS) with 0.1% SDS in the tube, and then resuspend the Qbeads\_STA evenly.

- 20. 18.3 Incubate the tube at  $95^{\circ}$ C for 5 mins.
- 21. 18.4 Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
- 22. 18.5 Collect the supernatant to a new tube.

## Trouble Shooting

Troubles	Solutions	
Biotinylated molecule binding is low.	1. Make sure the Qbeads are suspended	
	thoroughly before use.	
	2. Mix Qbeads and sample thoroughly and	
	continuously with either a tilt rotation	
	device or a vortexer.	
Qbeads do not collect on the magnet.	1. Make sure the tube is directly contact	
	with the magnetic stand.	
	2. Use <b>Magdorf</b> magnetic stand for best	
	performance.	

#### **Contact Information**

Please contact us when you have any question or comments via e-mail: <u>info@magqu.com</u>, or phone: +886-2-8667-1897.

## Remarkable Notes

- 1. Please keep Qbeads-STA away from magnets duringstorage.
- 2. Do not freeze.
- 3. Qbeads-STA is for research use only.



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## **Product Information**

#### Magnetic Qbeads Series

Products	Cat. No.		
Qbeads-Protein A	MF-PRA-3000		
Qbeads-Protein G	MF-PRG-3000		
Qbeads-NTA-Ni	MF-HIS-3000		
Qbeads-Streptavidin	MF-STA-3000		
Qbeads-Silica	MF-SIL-5010		
	MF-SIL-5024		
Qbeads-Hydroxyl	MF-DEX-3000		
Qbeads-Carboxyl	MF-COO-3000		
Qbeads-Amine	MF-NHH-3000		
Qbeads-Carboxyl Labeling Kit	KT-COO-3000-5SE		

#### Magnetic NanoParticle Series

Products	Particle size	Cat. No.
	30 nm	MF-DEX-0030
Magnetic Fluid- Hydroxyl	60 nm	MF-DEX-0060
	90 nm	MF-DEX-0090
Magnetic Fluid- Carboxyl	30 nm	MF-COO-0030
	60 nm	MF-COO-0060
	90 nm	MF-COO-0090
	30 nm	MF-NHH-0030
Magnetic Fluid-Amine	60 nm	MF-NHH-0060
	90 nm	MF-NHH-0090
NanoQ-Carboxyl Labeling Kit	60 nm	KT-COO-0060-1SE

#### Accessory

Products	Description	Cat. No.
Magdorf	for 1.5 ml eppendorf tube	MDF-08
	for magnetic separating column	MSD-01
Magstand	for 15 ml falcon tube	MSD-15
	for 50 ml falcon tube	MSD-50
	for 96-well culture plates	MTR-96
Magtractor	for 24-well culture plates	MTR-24
	for 6-well culture plates	MTR-06

#### Fluorescent Magnetic Nanoparticles

Products	Particle size	Cat. No.
Blue FluoroNanoQ	60 nm	MF-FBL-0060
Green FluoroNanoQ	60 nm	MF-FGR-0060
Red FluoroNanoQ	60 nm	MF-FRE-0060

#### **Customized Conjugation Service**

Products	Particle size	Cat. No.
Customized conjugated	3 µm	MF-CCS-3000
magnetic beads	30 nm	MF-CCS-0030
Antibody or peptide provided by customers (100 ug)	60 nm	MF-CCS-0060
	90 nm	MF-CCS-0090



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