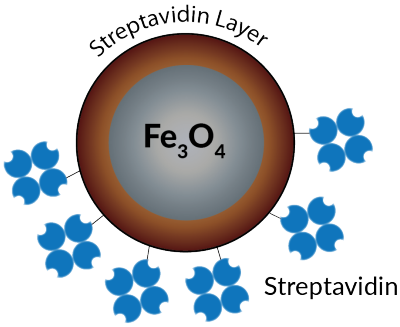
Product Data Sheet	**Product:** MGB-STRP-10

PuroMAG™ Magnetic Beads - Streptavidin



Features

- High binding capacity of Biotin-conjugated molecules:
  - Biotin binding capacity: **2-4 pmol/mg beads**
  - IgG binding capacity: **15-20 µg/mg beads**
- Rapid and efficient biomolecule purification from complex samples.
- Fast response to a magnet.
- High monodispersity.
- Stable in high salt conditions.

Applications

- Magnetic separation of Biotinylated cells, DNA, proteins, antibodies, and small ligands from complex samples. The streptavidin-coated magnetic beads are simply added to Biotinylated molecules for binding. The samples are transferred into a magnetic rack for easy removal of unbound residue.

Storage and Handling

Store the product at 2-8°C. **DO NOT FREEZE.** Freezing will cause aggregation of the magnetic beads and loss of binding capacity.

Vortex prior to use to resuspend Magnetic Beads.

Physicochemical Properties and Specifications

PARAMETER	VALUE
Diameter:	~ 500 nm
PDI:	0.01 to 0.1
Zeta potential:	- 4 -to -6 mV
Biotin binding capacity:	2 - 4 nmol/mg beads
IgG binding capacity:	15-20 µg/mg beads
Shelf life:	3 years
Storage buffer:	1x PBS, pH 7 with 0.02% sodium azide, 0.1% BSA
Storage conditions:	2-8 °C
Shipping conditions:	Ambient temperature

Ordering Information

Thomas No.:	CHM11N920
Mfr. No.:	MGB-STRP-10-2
Product Description:	PuroMAG™ Streptavidin-Coated Magnetic Beads
Concentration:	10 mg/ml
Volume:	2 mL

Thomas No.:	CHM11N921
Mfr. No.:	MGB-STRP-10-10
Product Description:	PuroMAG™ Streptavidin-Coated Magnetic Beads
Concentration:	10 mg/ml
Volume:	10 mL

Related Products

Thomas No.:	Mfr. No.	Product Description
CHM11N925	MGR-008	8-Positions Magnetic Rack, 1.5mL Tubes
CHM11N926	MGR-016	16-Positions Magnetic Rack, 1.5mL Tubes
CHM11N927	MGRM-004	4-Positions Magnetic Rack, 50mL Tubes
CHM11N928	MGRM-012	12-Positions Magnetic Rack, 50mL Tubes
CHM11N929	MGRD-008	4-Positions Magnetic Rack, 15mL Tubes
CHM11N930	MGR-PCR	0.2 mL PCR Tube Magnetic Rack
CHM11N931	MGR-PCRP	96-well PCR Plate Magnetic Rack
CHM11N932	MGR-DWP	96-well Deep Well Plate Magnetic Rack
CHM11N933	MGR-MPL	96-well Microplate Magnetic Rack

Protocols

Protocol A: Immobilization of proteins / antibodies

1. Vortex PuroMAG™ magnetic beads before use to fully resuspend the beads.
2. Transfer the desired volume of beads into a new 1.5 mL microcentrifuge tube.
3. Add biotinylated protein / antibody in 1X PBS to the tube. Incubate for 30 min at room temperature using gentle rotation.
4. Place the beads on the magnetic rack and incubate for 2 min. Remove the supernatant.
5. Remove the tube from the rack, add 1 mL of Wash Buffer PR and mix well. Place the tube on the magnetic rack and incubate for 2 min. Remove the supernatant.
6. Repeat washing Step 5 two more times.
7. Resuspend in the desired amount of 1X PBS.

NOTE: If a significant amount of non-specific adsorption of proteins / antibodies to the beads is observed, pre-wash the beads in Wash Buffer PR before performing protein / antibody immobilization:

- *Place the beads on the magnetic rack and incubate for 2 min. Remove the supernatant. Resuspend in the volume of Wash Buffer PR equal to the volume of stock beads used.*

Protocol B: Immobilization of nucleic acids

1. Vortex PuroMAG™ magnetic beads before use to fully resuspend the beads.
2. Transfer the desired volume of beads into a new 1.5 mL microcentrifuge tube.
3. Place the tube on the magnetic rack and incubate for 2 min. Discard the supernatant.
4. Add the same volume of Wash Buffer NA, 2X as the volume of stock beads used.
5. Add an equal volume of biotinylated DNA or RNA nucleic acid resuspended in ultra-pure water.
6. Incubate for 15 min at room temperature using gentle rotation.
7. Place the beads on the magnetic rack and incubate for 2 min. Remove the supernatant.
8. Remove the tube from the rack, add 1 mL of Wash Buffer NA, 1X and mix well. Place the tubes on the magnetic rack and incubate for 2 min. Remove the supernatant.
9. Repeat washing Step 8 two more times.
10. Resuspend the washed beads in the desired amount of 1X PBS or alternative buffer appropriate for the downstream application.

Protocol C: Releasing Immobilized Biotinylated Proteins / Antibodies

- Boil the samples for 5 min in 0.1% SDS. This will denature the proteins, including streptavidin, and will release biotinylated molecules into the solution.

Protocol D: Releasing Immobilized Biotinylated DNA

- Incubate the beads for 5 min at 65°C (or 2 min at 90°C) in 10 mM EDTA with 95% formamide.

Buffer Formulations

Wash Buffer NA, 2X
10 mM Tris-HCl (pH 7.4)
1 mM EDTA
2 M NaCl

Wash Buffer NA, 1X
Wash Buffer NA, 2X diluted 1:1 in ultra-pure water

Wash Buffer PR
1X PBS (pH 7.4)
0.1% BSA