Anti-MBP Magnetic Beads

1-800-632-7799
info@neb.com
www.neb.com

E8037S 006121115111

E8037S

10 mg (1 ml) **Lot: 0061211** **Exp: 11/15**
10 mg/ml **Store at 4°C (Do not freeze)**

Description: An affinity matrix for small-scale isolation and purification of maltose binding protein (MBP) fusion proteins. Monoclonal anti-MBP is covalently coupled to nonporous paramagnetic particles through a linkage that is stable and leak resistant over a wide pH range. This permits the immunomagnetic isolation of MBP-fusion proteins from cell culture supernatants. Immobilized fusion proteins can be used in subsequent experiments to capture (pull down) target proteins that specifically interact with the immobilized MBP fusion protein.

Supplied as a 10 mg/ml suspension in PBS Buffer (pH 7.2) containing 0.05% Tween 20 and 0.02% NaN_3.

Support Matrix: 1 µm nonporous paramagnetic microparticles.

Binding Capacity: 1 mg of Anti-MBP Magnetic Beads will bind 10 µg of MBP-paramyosin fusion protein.

Protocol:

Isolation of MBP-fusion protein using Anti-Maltose Binding Protein Magnetic Beads:

The following protocol is for the isolation of 2.5 µg of MBP-fusion protein from 200–500 µl cell culture extract at a concentration of 1 mg/ml extract.

1. Vortex and thoroughly suspend magnetic beads.
2. Aliquot 40 µl of bead suspension to a sterile microcentrifuge tube.
3. Add 500 µl 0.1 M NaPhosphate Buffer (pH 8.0) and vortex to resuspend. Apply magnet for 30 seconds, to pull beads to the side of the tube and decant supernatant. Repeat wash.
4. Add beads to 200–500 µl of cell culture extract.
5. Mix thoroughly and incubate at 4°C with agitation for 1 hour.
6. Apply magnet and decant supernatant.
7. Wash beads three times as in step 3 above.

At this point the purified MBP-fusion can be eluted from the beads or used directly for immunoprecipitation of target proteins.

MBP-Fusion Elution:

1. Resuspend bead pellet in 40 µl of 3X SDS Sample Loading Buffer [187.5 mM TrisHCl (pH 6.8), 6% (w/v) SDS, 30% glycerol, 150 mM DTT, 0.03% (w/v) Bromophenol blue, 2% β-mercaptoethanol].
2. Heat sample at 70°C for 5 minutes.
3. Place sample tube on magnetic rack for 30 seconds; load 20 µl of supernatant on SDS-PAGE gel and electrophoresis.
4. Transfer to PVDF membrane and probe with appropriate antibody.

CERTIFICATE OF ANALYSIS

Anti-MBP Magnetic Beads

1-800-632-7799
info@neb.com
www.neb.com

E8037S 006121115111

E8037S

10 mg (1 ml) **Lot: 0061211** **Exp: 11/15**
10 mg/ml **Store at 4°C (Do not freeze))**

Description: An affinity matrix for small-scale isolation and purification of maltose binding protein (MBP) fusion proteins. Monoclonal anti-MBP is covalently coupled to nonporous paramagnetic particles through a linkage that is stable and leak resistant over a wide pH range. This permits the immunomagnetic isolation of MBP-fusion proteins from cell culture supernatants. Immobilized fusion proteins can be used in subsequent experiments to capture (pull down) target proteins that specifically interact with the immobilized MBP fusion protein.

Supplied as a 10 mg/ml suspension in PBS Buffer (pH 7.2) containing 0.05% Tween 20 and 0.02% NaN_3.

Support Matrix: 1 µm nonporous paramagnetic microparticles.

Binding Capacity: 1 mg of Anti-MBP Magnetic Beads will bind 10 µg of MBP-paramyosin fusion protein.

Protocol:

Isolation of MBP-fusion protein using Anti-Maltose Binding Protein Magnetic Beads:

The following protocol is for the isolation of 2.5 µg of MBP-fusion protein from 200–500 µl cell culture extract at a concentration of 1 mg/ml extract.

1. Vortex and thoroughly suspend magnetic beads.
2. Aliquot 40 µl of bead suspension to a sterile microcentrifuge tube.
3. Add 500 µl 0.1 M NaPhosphate Buffer (pH 8.0) and vortex to resuspend. Apply magnet for 30 seconds, to pull beads to the side of the tube and decant supernatant. Repeat wash.
4. Add beads to 200–500 µl of cell culture extract.
5. Mix thoroughly and incubate at 4°C with agitation for 1 hour.
6. Apply magnet and decant supernatant.
7. Wash beads three times as in step 3 above.

At this point the purified MBP-fusion can be eluted from the beads or used directly for immunoprecipitation of target proteins.

MBP-Fusion Elution:

1. Resuspend bead pellet in 40 µl of 3X SDS Sample Loading Buffer [187.5 mM TrisHCl (pH 6.8), 6% (w/v) SDS, 30% glycerol, 150 mM DTT, 0.03% (w/v) Bromophenol blue, 2% β-mercaptoethanol].
2. Heat sample at 70°C for 5 minutes.
3. Place sample tube on magnetic rack for 30 seconds; load 20 µl of supernatant on SDS-PAGE gel and electrophoresis.
4. Transfer to PVDF membrane and probe with appropriate antibody.

CERTIFICATE OF ANALYSIS