



Anti-GFP Magarose Beads

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1. Product Description

Magarose Beads have superparamagnetism and rapid magnetic responsiveness. Peptides, proteins, antibodies, oligomeric nucleotide biological ligands can be coupled to the surface of microspheres. **Magarose Beads** is an important carrier of the medical and molecular biology research tools.

Anti-GFP Magarose Beads use anti-GFP Antibody as the ligand to specifically bind GFP, eGFP and their fusion expressed proteins without the BFP label.

Table 1. Characteristics of Anti-GFP Magarose Beads

Item	Description
Matrix	Magnetic agarose
Ligand	Anti-GFP Antibody
Binding Capacity	>1mg GFP fusion protein/ml medium
Particle Size (µm)	30-100
Storage Buffer	0.02% NaN ₃ , 1×PBS
Magnetic beads volume	20%(V/V) slurry
Storage Temperature	2°C - 8°C

2. Purification Procedure

2.1 Sample preparation

To insure that proper ionic strength and pH are maintained for optimal binding, it is necessary to dilute samples or cell culture supernatant at least 1:1 with Binding/Wash Buffer. Alternatively, the sample can be dialyzed overnight against Binding/Wash Buffer.

It is recommended to filter the sample solution by passing them through a 0.22µm or 0.45µm filter before use.

2.2 Buffer preparation

Water and chemicals used for buffer preparation should be of high purity. It is recommended to filter the buffers by passing them through a 0.22µm or 0.45 µm filter before use.

Binding/Wash Buffer: 50mM Tris, 0.15M NaCl, pH7.4

Elution Buffer: 0.1M glycine HCl, pH3.0

Neutralization Buffer: 1M Tris-HCl, pH8.0

2.3 Purification

2.3.1 Preparation of the Magnetic Beads

- 1) Completely resuspend the beads by shaking or vortexing the vial.
- 2) Transfer appropriate amount **Anti-GFP Magarose Beads**(20% v/v) into a clean tube.
- 3) Place the tube on a magnetic separation rack to collect the beads. Remove and discard the supernatant.
- 4) Add Binding/Wash Buffer to the tube and invert the tube several times to mix. Use the magnetic separation rack to collect the beads and discard the supernatant. Repeat this step twice.

2.3.2 Sample Adsorption

Add the sample solution to the magnetic bead pretreated in Step 2.3.1, swirl and mix evenly. Place the sample on a rotator at room temperature. After about 30min, Use the magnetic separation rack to collect the beads and discard the supernatant.

2.3.3 Wash the miscellaneous

Add 5 column volumes Wash Buffer to the centrifuge tube,swirl and mix evenly, and place the centrifuge tube on the magnetic separation rack for 1minute to collect the beads. Remove and discard the supernatant. Repeat the washing for 2 times.





2.3.4 Non-denatured elution

Add 3 to 5 column volumes of Acid Elution Buffer to the tube, mix on a rotator at room temperature for 5-10 minutes, place the centrifuge tube on the magnetic separation rack for 1minute to collect the beads. Collect the eluate. This operation can be repeated once.

Add a tenth of the volume of neutralizing solution to the eluate in advance and adjust the pH to 7.0-8.0.

Note: After acid elution, magnetic Beads should be balanced immediately with theBinding Buffer. The **Anti-GFP Magarose Beads** should be no more than 20 min in the eluent.

2.3.5 Denaturing elution

DTT and β -Mercaptoethanol in the SDS-PAGE sample loading buffer can break the disulfide bond and disconnect the light chain and heavy chain of antibody. Anti-DYKDDDDK antibody can also be denatured by SDS in the SDS-PAGE sample loading buffer. So **Anti-GFP Magarose Beads** can not be reused again after denaturing elution.

Add 2X SDS-PAGE Sample Buffer with equal volume of magnetic beads into each tube and heat the tube at 100°C for five minutes.

Place the centrifuge tube on the magnetic separation rack for 1minute to collect the beads. Take the supernatant for SDS-PAGE electrophoresis.

Note: **Anti-GFP Magarose Beads** cannot be reused after denaturing elution.

3. Related Products

Product	Cat. No.	Size
Anti-GFP Magarose Beads	SM038001	1 ml
	SM038005	5 ml
	SM038025	25 ml
	SM038100	100 ml
	SM03801L	1 L

