

For Research Use Only

MBP tag Monoclonal antibody

Catalog Number: 66003-1-Ig **57 Publications**



Basic Information

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| Catalog Number: 66003-1-Ig | GenBank Accession Number: GeneID (NCBI): | Purification Method: Protein A purification |
| Size: 150ul , Concentration: 2000 ug/ml by Nanodrop; | Full Name: Calculated MW: 40 kDa | CloneNo.: 4C6H4 |
| Source: Mouse | Observed MW: 40 kDa | Recommended Dilutions: WB 1:1000-1:8000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate |
| Isotype: IgG2a | | |
| Immunogen Catalog Number: AG0942 | | |

Applications

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| Tested Applications: WB, IF/ICC, IP, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF, IP, CoIP | WB : Recombinant protein, |
| Species Specificity: recombinant protein | IP : Recombinant protein protein, |
| Cited Species: human | |

Background Information

Protein tags are protein or peptide sequences located either on the C- or N- terminal of the target protein, which facilitates one or several of the following characteristics: solubility, detection, purification, localization and expression. Maltose binding protein(MBP) is the 370 amino acid product of the E.coli mal E gene. MBP is a useful affinity tag that can increase the expression level and solubility of the resulting tagged protein. The MBP tag also promotes proper folding of the attached protein. Plasmid vectors have been constructed utilizing the MBP domain that allow the synthesis of high levels of MBP-fusion proteins that can be purified in a one step procedure by affinity chromatography cross linked amylose resin. Once bound to amylose, the MBP protein can then be separated from the target protein by cleavage by coagulation Factor Xa at a specific four residue site. Alternatively, the intact fusion protein can be specifically eluted from the resin by the addition of excess free maltose. Subsequent to elution, MBP fusion protein can be visualized either by Western blot analysis or immunoprecipitation using antibodies specific for the MBP-tag. An antibody to MBP can also be used to isolate or detect expression of the protein.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|------------|-------------|
| Song Liu | 32908127 | Nat Commun | WB |
| Guizhen Zhao | 29089350 | Circ Res | WB |
| Bixin Bai | 36380696 | Plant J | WB |

Storage

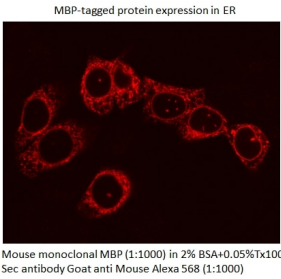
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

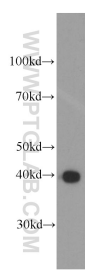
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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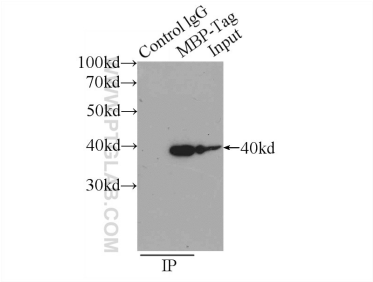
Selected Validation Data



IF result of MBP tag antibody (66003-1-Ig, 1:1,000) with MBP-Tagged protein.Courtesy of Neeraj Tiwari, PhD, Yale School of Medicine, Yale University.



Recombinant protein were subjected to SDS PAGE followed by western blot with 66003-1-Ig (MBP tag antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



IP result of anti-MBP tag (IP:66003-1-Ig, 5ug; Detection:66003-1-Ig 1:20000) with Recombinant protein protein lysate 800ug.