For Research Use Only

MBP tag Monoclonal antibody, PBS Only

Catalog Number: 66003-1-PBS



Basic Information

Catalog Number:

66003-1-PBS

Size:

100ug, Concentration: 1 mg/ml by

Nanodrop;

Source Mouse Isotype IgG2a

Immunogen Catalog Number:

AG0942

GenBank Accession Number:

GeneID (NCBI):

Full Name:

Calculated MW: 40 kDa

Observed MW:

40 kDa

Purification Method: Protein A purification

CloneNo.:

4C6H4

Applications

Tested Applications: WB, IF/ICC, IP, ELISA Species Specificity: recombinant protein

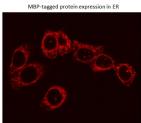
Background Information

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.

Storage

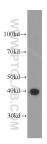
Storage: Store at -80°C. Storage Buffer: PBS only

Selected Validation Data

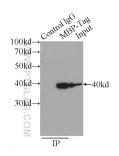


Mouse monoclonal MBP (1:1000) in 2% BSA+0.05%Tx100 Sec antibody Goat anti Mouse Alexa 568 (1:1000)

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. This data was developed using the same antibody clone with 66003-1-PBS in a different storage buffer formulation.



Recombinant protein were subjected to SDS PAGE followed by western blot with 66003-1-lg (MBP tag antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66003-1-PBS in a different storage buffer formulation.



IP result of anti-MBP tag (IP:66003-1-Ig, 5ug; Detection:66003-1-Ig 1:20000) with Recombinant protein protein lysate 800ug. This data was developed using the same antibody clone with 66003-1-PBS in a different storage buffer formulation