

For Research Use Only

# MBP tag Monoclonal antibody

Catalog Number: 66003-1-Ig **63 Publications**



## Basic Information

Catalog Number:

66003-1-Ig

Size:

150ul, Concentration: 2000 ug/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

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC: 1:500-1:2000

## Applications

Tested Applications:

WB, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

recombinant protein

Cited Species:

human

Positive Controls:

WB: Recombinant protein, transfected HEK-293T cells

IP: Recombinant protein protein,

IF/ICC: Transfected cells,

## 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, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

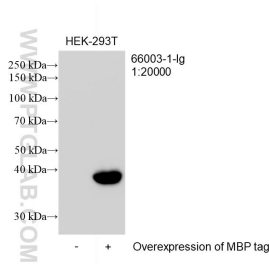
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

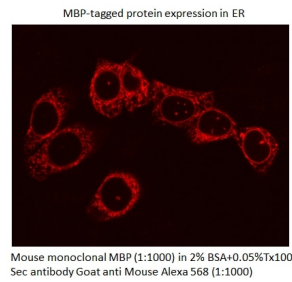
E: proteintech@ptglab.com  
W: ptglab.com

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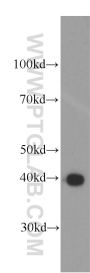
## Selected Validation Data



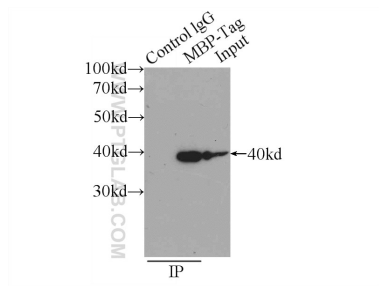
Non-transfected or MBP-tagged transfected HEK-293T cells were subjected to SDS PAGE followed by western blot with 66003-1-Ig (MBP tag antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours



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.