

## Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody

Maltose Binding Protein (MBP) Epitope Tag Antibody Catalog # ASR4386

### **Specification**

# Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Product Information

Host Conjugate Clonality Application Application Note Rabbit Unconjugated Polyclonal WB, E, I, LCI

Anti-MBP is optimally suited for monitoring the expression of MBP tagged fusion proteins. As such, anti-MBP/MBP can be used to identify fusion proteins containing the MBP epitope. The antibody recognizes the MBP epitope tag fused to the amino- or carboxy- termini of targeted proteins. This antibody has been tested by ELISA and western blotting against MBP containing recombinant proteins. Although not tested, this antibody is likely functional for immunoprecipitation and immunocytochemistry, and other immunodetection techniques. Maltose binding protein is a bacterial protein, which is often used in protein expression studies because it creates a stable fusion product that does not appear to interfere with the bioactivity of the protein of interest. It also allows for its easy purification from bacterial extracts under mild conditions. Anti-MBP is a companion to the pMAL protein expression system and can be used for the detection and purification of MBP-fusion proteins expressed in E. coli. By Western blot, a band is seen at ~ 42 kDa representing MBP.

Physical State Buffer

**Immunogen** 

Reconstitution Volume Reconstitution Buffer

Preservative

Lvophilized

0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

This antibody was purified from whole rabbit serum prepared by repeated immunizations with the MBP epitope tag recombinant protein.

1.0 mL

Restore with deionized water (or

equivalent)

0.01% (w/v) Sodium Azide



# Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Additional Information

## **Purity**

This IgG purified antibody is directed against MBP and is useful in determining its presence in various assays. This polyclonal anti-MBP tag antibody detects over-expressed proteins containing the MBP epitope tag. To date this antibody has reacted with all MBP tagged proteins so far tested. In western blotting of bacterial extracts the antibody does not cross-react with endogenous proteins.

### **Storage Condition**

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

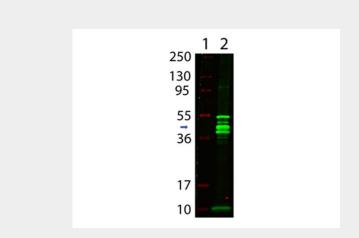
## Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Protein Information

### Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Protocols

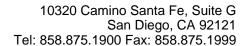
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Images



Western Blot showing detection of Maltose Binding Protein (MBP). Lane 1: MW markers. Lane 2:





Maltose Binding Protein (p/n 000-001-385) [0.05  $\mu$ g]. Protein was run on a 4-20% gel and transferred to 0.45  $\mu$ m nitrocellulose. Blocking with 1% BSA-TTBS (p/n MB-013, diluted to 1X) 30 min at 20°C. Primary Antibody: Anti-MBP (RABBIT) antibody (p/n 200-401-385) was used at 1:1000 overnight at 4°C. Secondary Antibody: Anti-Rabbit IgG (GOAT) IRDye800® conjugated antibody (p/n 611-131-002) was used at 1:20,000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) for 30 min at 20°C. Imaged on the LiCor Odyssey imaging system. Predicted MW: ~42 kDa, the other bands present are recombinant MBP breakdown.

## Anti-MALTOSE BINDING PROTEIN (MBP) EPITOPE TAG (RABBIT) Antibody - Background

Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged protein's biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures. Expression vectors producing epitope tag fusion proteins are available for a variety of host expression systems including bacteria, yeast, insect and mammalian cells. Rockland Immunochemicals produces anti-epitope tag antibodies against many common epitope tags including Myc, GST, GFP, 6X His, MBP, FLAG and HA. Rockland Immunochemicals also produces antibodies to other tags including FITC, Rhodamine (TRITC), DNP and biotin.