

## **Product Datasheet**

## Maltose Binding Protein (MBP) Epitope Tag Antibody Biotin Conjugated (orb344775)

Catalog Number orb344775

**Description** MBP Epitope Tag antibody (Biotin)

Species/Host Rabbit

**Conjugation** Biotin

**Tested Applications** ELISA, WB

**Immunogen** This antibody was purified from whole rabbit serum prepared by repeated

immunizations with the MBP epitope tag recombinant protein.

**Preservatives** 0.01% (w/v) Sodium Azide

**Form/Appearance** Liquid (sterile filtered)

**Concentration** 1.0 mg/mL

**Storage** Store vial at -20° C or below prior to opening. This vial contains a relatively low

volume of reagent (25  $\mu$ L). To minimize loss of volume dilute 1:10 by adding 225  $\mu$ L of the buffer stated above directly to the vial. Recap, mix thoroughly and

briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and

thawing.

**Note** For research use only

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## **Application notes**

Anti-MBP Biotin Conjugated Antibody 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.

Isotype IgG

**Clonality** Polyclonal

**Antibody Type** Primary Antibody

This IgG purified antibody is directed against MBP and is useful in determining its **Purity** 

> presence in various assays. This polyclonal anti-MBP tag antibody detects overexpressed 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.

ELISA: 1:10,000-1:50,000, WB: 1:1,000-1:5,000 **Dilution Range** 

12 months from date of receipt. **Expiration Date** 

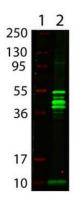
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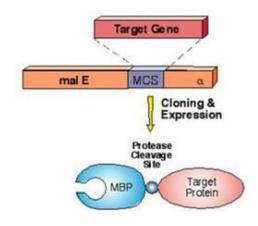




Anti-MBP epitope tag polyclonal antibody detects MBP-tagged recombinant proteins by western blot. Polyclonal rabbit-anti-MBP epitope tag at 0.5-1.0 ug/ml was used to detect 1.0 ug of recombinant protein containing the MBP epitope tag. The apparent molecular weight of this band is 42 kDa. A minor band at corresponding to multimers of this protein is also evident. A 4-20% gradient gel was used to separate the protein by SDS-PAGE. The protein was transferred to nitrocellulose using standard methods. After blocking the membrane was probed with the primary antibody for 1 h at room temperature followed by washes and reaction with a 1:2500 dilution of IRDye 800 conjugated Gt-a-Rabbit IgG [H&L] for 30 min at room temperature.



Western Blot showing detection of Maltose Binding Protein (MBP) (0.05  $\mu$ g) in Lane 2. MW markers indicated in Lane 1. Protein was run on a 4-20% gel and transferred to 0.45  $\mu$ m nitrocellulose. After blocking with 1% BSA-TTBS (p/n orb348540, diluted to 1X) 30 min at 20°C Anti-MBP (RABBIT) antibody (p/n orb344609) was used at 1:1000 overnight at 4°C. Anti-Rabbit IgG (GOAT) IRDye800® conjugated antibody secondary antibody was used at 1:20000 in Blocking Buffer for Fluorescent Western Blotting (p/n orb348637) for 30 min at 20°C. A band is present at the correct molecular weight, ~42 kDa, the other bands present are recombinant MBP breakdown.



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