Product Datasheet

Maltose Binding Protein (MBP) Epitope Tag Antibody (orb344609)

Description	MBP Epitope Tag antibody
Species/Host	Rabbit
Conjugation	Unconjugated
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	Lyophilized
Concentration	1.0 mg/mL
Storage	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.
Note	For research use only

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Application notes	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.
Isotype	IgG
Clonality	Polyclonal
Antibody Type	Primary Antibody
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.
Dilution Range	ELISA: 1:10,000-1:50,000, WB: 1:1,000-1:5,000
Expiration Date	12 months from date of receipt.

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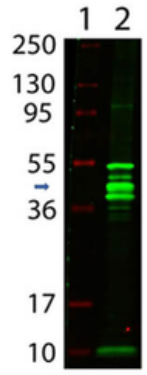
Anti-MBP epitope tag polyclonal antibody detects MBP-tagged recombinant proteins by western blot. Polyclonal rabbit-anti-MBP epitope tag at 0.5-1.0 ug/ml was used to detect 1.0 ug of recombinant protein containing the MBP epitope tag. The apparent molecular weight of this band is 42 kDa. A minor band 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 of Anti-MBP epitope tag polyclonal antibody. Lane 1: 1.0 ug of recombinant protein containing the MBP epitope tag. Primary Antibody: Polyclonal rabbit-anti-MBP epitope tag at 0.5-1.0 ug/ml for 1 h at room temperature. Secondary Antibody: 1:2500 dilution of IRDye 800 conjugated Gt-a-Rabbit IgG [H&L] for 30 min at room temperature. Imaging: Predicted MW: ~42 kDa. A minor band at corresponding to multimers of this protein is also evident.



Western Blot showing detection of Maltose Binding Protein (MBP). Lane 1: MW markers. Lane 2: Maltose Binding Protein [0.05 µg]. Protein was run on a 4-20% gel and transferred to 0.45 µm nitrocellulose. Blocking with 1% BSA-TTBS (p/n orb348540, diluted to 1X) 30 min at 20°C. Primary Antibody: Anti-MBP (RABBIT) antibody (p/n orb344609) was used at 1:1000 overnight at 4°C. Secondary Antibody: Anti-Rabbit IgG (GOAT) IRDye800® conjugated antibody was used at 1:20000 in Blocking Buffer for Fluorescent Western Blotting (p/n orb348637) for 30 min at 20°C. Predicted MW: ~42 kDa, the other bands present are recombinant MBP breakdown.

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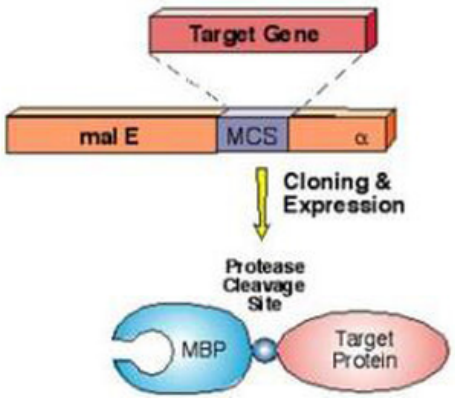

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