Anti-MBP-Tag: Mouse Maltose Binding Protein-Tag Antibody

Product Sheet CP10165

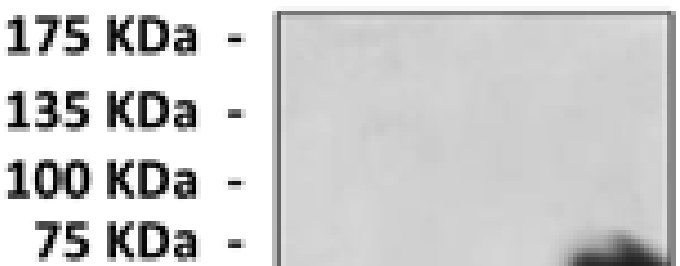
Description

BACKGROUND Maltose Binding Protein, MBP, is commonly used to create fusion proteins. The tag has the size of 392 amino acids (roughly 42 KDa),[1] which, compared to other tags like the myc- or the FLAG-tag, is quite big. It is fused to the N-terminus of a protein. However, many commercially-available sources of MBP-tagged plasmids include a factor Xa site for cleavage of the MBP tag during protein purification.

A MBP-tag is often used to separate and purify as well as confirm expression of proteins that contain the MBP-fusion. MBP-fusion proteins can be produced in *Escherichia coli*, as recombinant proteins. The MBP part binds its substrate, amylose. Agarose beads can be coated with amylose, and such amylose-Agarose beads bind MBP-proteins. These beads are then washed, to remove contaminating bacterial proteins. Adding free amylose to beads that bind purified MBP-proteins will release the MBP-protein in solution. MBP-tag antibody is a useful tool for confirming protein expression, localization of expressed proteins in cells, as well as affinity-binding of MBP-tagged proteins.[2]

REFERENCES

1. Guan, C. et al. Gene 67: 21–30, 1987
2. Riggs, P., in Ausubel, F.M. et al. (eds), Cur¬rent Prot. in Molecular Biol. (1992) Greene Associates/Wiley Interscience, New York.



[1]
(Click to Enlarge) Western Blot detection of MBP-Tag in bacterial lysates containing various MBP-Tagged proteins using MBP-Tag Antibody.

Details

Cat.No.:	CP10165
Antigen:	Purified recombinant MBP-Tag expressed in *E. coli*.
Isotype:	Mouse IgG1
Species & predicted species cross-reactivity ( ):	MBP-tag
Applications & Suggested starting dilutions:*	WB 1:1000 IP 1:50 IHC n/d ICC 1:200 FACS 1:200
Predicted Molecular Weight of protein:	42 kDa
Specificity/Sensitivity:	Detects MBP-Tag proteins without cross-reactivity with other related proteins.
Storage:	Store at -20°C, 4°C for frequent use. Avoid repeated freeze-thaw cycles.

*Optimal working dilutions must be determined by end user.

Products

Resources/Documents

Product Sheet CP10165 [2]

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