

BACKGROUND

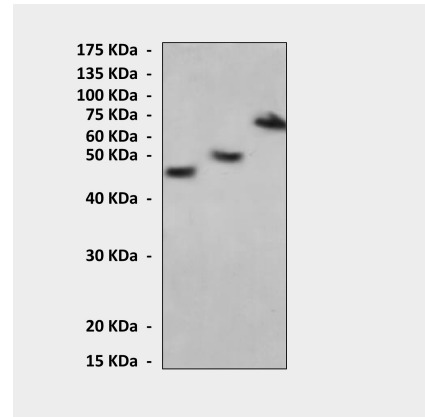
BMP is commonly used to create fusion proteins. The tag has the size of 392 amino acids (roughly 42 kDa),¹ which, compared to other tags like the myc- or the FLAG-tag, is quite big. It is fused to the N-terminus of a protein. However, many commercially-available sources of MBP-tagged plasmids include 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), Current Prot. in Molecular Biol. (1992) Greene Associates/Wiley Interscience, New York.

QUALITY CONTROL DATA



Western Blot detection of MBP-tag in bacterial lysates containing various MBP-tagged proteins using MBP-tag Antibody.

TECHNICAL INFORMATION

Source:

MBP-tag Antibody is a mouse monoclonal antibody raised against purified recombinant MBP-tag expressed in *E. coli*.

Specificity and Sensitivity:

This antibody detects MBP-tag proteins without cross-reactivity with other related proteins.

Storage Buffer: PBS and 30% glycerol

Storage:

Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	1:50
IHC	n/d
ICC	1:200
FACS	1:200

**Optimal dilutions must be determined by end user.*

