

# Anti-MBP, AlpSdAbs<sup>®</sup> VHH

## Summary

Code	015-101-001
Immunogen	MBP fusion protein
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to Rabbit IgG Fc(mutation)
Conjugate	Unconjugated(6*his tag and one cys were added at the C terminal of the VHH)
Specificity	MBP
Cross-Reactivity	Recognizes MBP specifically. Does not cross-react with other proteins.
Purity	Recombinant Expression and Affinity purified
Concentration	1mg/ml
Formation	Liquid, 10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Storage	Store at –20 °C(Avoid freeze / thaw cycles)

## Description

Anti-MBP, AlpSdAbs<sup>®</sup> VHH is designed for detecting MBP fusion proteins specifically. Anti-MBP, AlpSdAbs<sup>®</sup> VHH is based on monoclonal, recombinant, single domain antibody derived from the variable regions of heavy chain of Alpaca pacous. Based on immunoelectrophoresis and/or ELISA, Anti-MBP, AlpSdAbs<sup>®</sup> VHH detects the MBP selectively, no reactivity with other proteins.

#### Background

MBP is used to increase the solubility of recombinant proteins expressed in E. coli. In these systems, the protein of interest is often expressed as a MBP-fusion protein, preventing aggregation of the protein of interest. The mechanism by which MBP increases solubility is not well understood. In addition, MBP can itself be used as an affinity tag for purification of recombinant proteins.

VHH are single-domain antibodies derived from the variable regions of heavy chain of Camelidae immunoglobulin. The size of VHH is extremely small(<15KDa) compared to other forms of antibody fragment, which significantly increase the permeability of VHH. Thus VHH is considered of great value for research, diagnostics and therapeutics.

## **Benefits**

High lot-to-lot consistency Increased sensitivity and higher affinity Animal-free production

## Application notes

WB	1:5,000-1:20000
ELISA	1:5,000-1:20000
IP	1-2ug/sample

Dilution factors are presented in the form of a range because the optimal dilution is a function of many factors, such as antigen density, permeability, etc. The actual dilution used must be determined empirically.

This product is for research use only and is not approved for use in humans or in clinical