Anti-V5 tag, AlpSdAbs® VHH(Biotin)

Summary

Code	064-101-004
Immunogen	V5 tag fusion protein
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin
Specificity	V5 tag sequence(GKPIPNPLLGLDST)
Cross-Reactivity	Highly selective for V5 tag sequence
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-V5 tag, AlpSdAbs® VHH(Biotin) is designed for detecting V5 tag fusion proteins. Anti-V5 tag, AlpSdAbs® VHH(Biotin) is based on monoclonal, recombinant, single domain antibody to V5 tag coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-V5 tag, AlpSdAbs® VHH(Biotin) detects the V5 tag selectively, no reactivity with other proteins.

Background

The V5 tag is a 14 amino acid peptide derived from a small epitope on the P and V proteins of simian virus 5 (SV5), a member of the paramyxovirus family. This peptide can be expressed and detected with the protein of interest as an amino-terminal or carboxy-terminal fusion. Because of its small size, V5 tag is unlikely to affect the tagged protein's biochemical properties. V5 tag is useful for the labeling and detection of proteins using immunoblotting, immunoprecipitation, and immunostaining techniques.

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

Suggested Working Concentration

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

BLI (biolayer interferometry)
SPR (surface plasmon resonance)

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.