Anti-Biotin, AlpSdAbs® VHH

Summary

Code#	078-101-001
Immunogen	Biotin conjugated KLH
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Unconjugated(6*his tag and one cys were added at the C terminal of the VHH)
Specificity	Biotin and biotinylated antibody, protein, peptides, oligonucleotides or solid matrices.
Cross-Reactivity	No cross-reactivity with other antigen.
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-Biotin, AlpSdAbs® VHH is designed for detecting biotin or biotinylated protein specifically. Anti-Biotin, AlpSdAbs® VHH is monovalent, recombinant single domain antibody derived from the variable regions of heavy chain of Alpaca pacous. Based on immunoelectrophoresis and/or ELISA, Anti-Biotin, AlpSdAbs® VHH reacts with biotin or biotinylated protein selectively, no reactivity with other antigen.

Background

Biotin is widely conjugated to proteins and antibodies for biochemical assays. Avidin (streptavidin)-biotin system is commonly used for many immunoassays such as ELISA, Flow Cytometry, Immunofluorescence, In Situ Hybridization, and Immunohistochemistry. Anti-Biotin antibody is a better alternative to avidins to minimize background and maximize signal intensity.

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

ELISA： 1:5000-1:20000
WB: 1:5000-1:20000
ICC/IF: 1:100-1:1000
IP: 1-2ug/sample

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