

Anti-TagFP, AlpSdAbs[®] VHH

Summary

Code	017-103-001
Immunogen	TagFP fusion protein
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	TagFP(TagRFP/TagBFP)
Cross-Reactivity	Highly selective for TagRFP/TagBFP. Does not cross-react with common GFP or dsRed derivatives
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-TagFP, AlpSdAbs[®] VHH is designed for detecting TagFP fusion proteins specifically. Anti-TagFP, AlpSdAbs[®] 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-TagFP, AlpSdAbs[®] VHH detects the TagFP selectively, no reactivity with other proteins.

Background

TagRFP is derived from the Entacmaea quadricolor fluorescent protein TurboRFP (a random mutant of eqFP578), with mutations of R162E, Q166D, S180N, F198V, F200Y at the hydrophilic interface. TagBFP was derived from TagRFP with the some mutations. TagRFP/TagBFP has a high fluorescent quantum yield (Φ_{flu} 0.48) and is widely used for fluorescent imaging. For biochemical analysis including mass spectrometry and enzymeactivity measurements.

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	1:5,000-1:20,000
WB	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