



Anti-TagFP, AlpSdAbs[®] VHH(Biotin)

Summary

Code	017-103-004
Immunogen	TagFP
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin
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	Recombinant Expression and Affinity purified
Storage	Store at -20 °C(Avoid freeze / thaw cycles)

Description

Anti-TagFP, AlpSdAbs[®] VHH(Biotin) is designed for detecting TagFP fusion proteins. Anti-TagFP, AlpSdAbs[®] VHH(Biotin) is based on monoclonal, recombinant, single domain antibody to TagFP coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-TagFP, AlpSdAbs[®] VHH(Biotin) 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	1:5,000-1:20000
WB	1:1,000-1:5000
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.

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