

Anti-Human IgA, AlpSdAbs[®] VHH(Biotin)

Summary

Code	023-109-004
Immunogen	Human IgA
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin-SP (long spacer)
Specificity	Human IgA
Cross-Reactivity	Does not bind to human IgG, IgE, IgM, IgD
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 $^\circ\text{C}(\text{Avoid freeze}$ / thaw cycles), Stable for 12 months at -20 $^\circ\text{C}$

Description

Anti-Human IgA, AlpSdAbs[®] VHH(Biotin) is designed for detecting human IgA specifically. Anti-Human IgA, AlpSdAbs[®] VHH(Biotin) is based on monovalent, recombinant single domain antibody to human IgA coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgA, AlpSdAbs[®] VHH(Biotin) reacts with human IgA chain selectively, no reactivity with human IgG, IgE, IgM, IgD.

Background

In mammals, antibodies are classified into five main classes or isotypes–IgA, IgD, IgE, IgG and IgM. They are classed according to the heavy chain they contain – alpha, delta, epsilon, gamma or mu respectively. IgA is the major immunoglobulin class in body secretions. It may serve both to defend against local infection and to prevent access of foreign antigens to the general immunologic system.

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	1:5000-1:20000
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.

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