

Anti-Human IgE, AlpSdAbs® VHH(Biotin)

Summary

Code	023-107-004
Immunogen	Human IgE
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin-SP (long spacer)
Specificity	Human IgE
Cross-Reactivity	Does not bind to human IgG, IgA, 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 °C(Avoid freeze / thaw cycles), Stable for 12 months at -20°C

Description

Anti-Human IgE, AlpSdAbs® VHH(Biotin) is designed for detecting human IgE specifically. Anti-Human IgE, AlpSdAbs® VHH(Biotin) is based on monovalent, recombinant single domain antibody to human IgE chain coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgE, AlpSdAbs® VHH(Biotin) reacts with human IgE chain selectively, no reactivity with human IgG, IgA, 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. IgE is the class of antibodies produced in the lungs, skin, and mucous membranes. It may protect against parasite invasion, but it is a major factor in allergic reactions. The antigen-specific IgE interacts with mast cells and eosinophils, triggers the release of histamine, leukotrienes and other substances that lead to the itching, sneezing and congestion of allergies - and the life threatening respiratory distress of asthma and anaphylactic shock.

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