

# Anti-Human IgD, AlpSdAbs® VHH

## Summary

Code	023-108-001
Immunogen	Human IgD
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	Human IgD
Cross-Reactivity	Does not bind to human IgG, IgA, IgM, IgE
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-Human IgD, AlpSdAbs® VHH is designed for detecting human IgD specifically. Anti-Human IgD, 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-Human IgD, AlpSdAbs® VHH reacts with human IgD selectively, no reactivity with human IgG, IgA, IgM, IgE.

## 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. Immunoglobulin D (IgD) is an antibody isotype typically expressed in the plasma membranes of naïve B cells, usually co-expressed with IgM. IgD is also found secreted in small amounts in serum. Secreted IgD is produced as a monomeric antibody with two heavy chains of the delta class, and two Ig light chains.

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

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