

## Anti-Human lambda, AlpSdAbs<sup>®</sup> VHH(iFluor594 ×4)

## Summary

Code	023-103-008	
Immunogen	Fab(lambda) region of human IgG	
Host	Alpaca pacous	
Isotype	VHH domain of alpaca IgG2b/2c	
Conjugate	iFluor594(Ex: 592nm, Em: 614nm)	
Specificity	Human IgG lambda chain	
Cross-Reactivity	Cross-react with cynomolgus IgG, No cross-reactivity with rabbit, mouse, rat, goat IgG	
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, 50% glycerol	
Storage	Store at -20 °C(Avoid freeze / thaw cycles) , Protect from light	

## Description

Anti-Human lambda, AlpSdAbs<sup>®</sup> VHH(iFluor594 ×4) is designed for detecting human IgG lambda light chain specifically. Anti-Human lambda, AlpSdAbs<sup>®</sup> VHH(iFluor594 ×4) is based on monovalent, recombinant single domain antibody to human IgG lambda light chain coupled to iFluor594. Based on immunoelectrophoresis and/or ELISA, Anti-Human lambda, AlpSdAbs<sup>®</sup> VHH(iFluor594 ×4) reacts with human IgG lambda light chain selectively, no reactivity with rabbit, mouse, rat, goat IgG.

## 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. IgG is the most abundant antibody in normal human serum, accounting for 70-85% of the total immunoglobulin pool. Human IgG consists of four human subclasses (IgG1, IgG2, IgG3 and IgG4), and each contains a different heavy chain. The whole IgG molecule possesses both the Fc region and the Fab region, which possessing the epitope-recognition site. The IgG contains two heavy and light chains(kappa or lambda). The heavy chain is about 50 KD and the light chain is about 25 KD. The common IgG is monomeric with a molecular weight of approximately 150 kD.

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	Application notes	
High lot-to-lot consistency Increased sensitivity and higher affinity Animal-free production	Flow Cyt ICC/IF ELISA WB Super-resolut	1:200-1:2000 1:200-1:2000 1:5000-1:20000 1:5000-1:20000 ion microscopy

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