Anti-Human IgG(CH3 Fragment specific), AlpSdAbs® VHH(APC)

Code	023-113-011
Immunogen	Human IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	APC(Ex: 651nm, Em: 662nm)
Specificity	Human IgG(CH3 Fragment specific)
Cross-Reactivity	Recognizes human IgG CH3 fragment specifically, and reacts with cynomolgus IgG. No Cross-reactivity to rabbit , mouse, rat, goat IgG
Purity	Recombinant Expression and Affinity purified
Concentration	0.1mg/mL
Formation	Liquid, 10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Storage	Store at 2-8 °C, Protect from light.

Description

Anti-Human IgG(CH3 Fragment specific), AlpSdAbs® VHH(APC) is designed for detecting human IgG CH3 fragment specifically. Anti-Human IgG(CH3 Fragment specific), AlpSdAbs® VHH(APC) is based on monoclonal, recombinant single domain antibody to human IgG Fc fused to APC. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG(CH3 Fragment specific), AlpSdAbs® VHH(APC) reacts with the CH3 fragment of human IgG specifically.

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

High lot-to-lot consistency
Increased sensitivity and higher affinity
Animal-free production

Application notes

Flow Cyt	1:200-1:1000
ICC/IF	1:200-1:1000

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.