AlpVHHs

Anti-Human IgG(CH1 Fragment specific), AlpHcAbs[®] Goat antibody(Biotin)

Summary

Code	023-405-004
Immunogen	Human IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)
Conjugate	Unconjugated
Specificity	Human IgG CH1 fragment
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
Storage	Store at –20 °C(Avoid freeze / thaw cycles)

Description

Anti-Human IgG(CH1 Fragment specific), AlpHcAbs® Goat antibody(Biotin) is designed for detecting human IgG CH1 fragment specifically. Anti-Human IgG(CH1 Fragment specific), AlpHcAbs® Goat antibody(Biotin) is based on monoclonal, recombinant, goat IgG Fc fused single domain antibody to human IgG CH1 fragment coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG(CH1 Fragment specific), AlpHcAbs® Goat antibody(Biotin) is based on monoclonal, recombinant, goat IgG Fc fused single domain antibody to human IgG CH1 fragment coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG(CH1 Fragment specific), AlpHcAbs® Goat antibody(Biotin) reacts with human IgG CH1 fragment 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 heavy chain chains consist of a variable domain, VH, and three constant domains CH1, CH2, and CH3. The common IgG is monomeric with a molecular weight of approximately 150 kD. Using antibody with Fc(mutation), the background from Fc receptors will be eliminated.

Benefits

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

Suggested Working Concentration

WB	1:5000-1:20000
ELISA	1:10000-1:5000
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