Anti-Human IgG(CH3 Fragment specific), AlpHcAbs® Goat antibody

Summary

Code	023-413-001
Immunogen	Human IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)
Conjugate	Unconjugated
Specificity	Human IgG CH3 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, 50% Glycerol
Storage	Store at –20 °C(Avoid freeze / thaw cycles)

Description

Anti-Human IgG(CH3 Fragment specific), AlpHcAbs® Goat antibody is designed for detecting human IgG CH3 fragment specifically. Anti-Human IgG(CH3 Fragment specific), AlpHcAbs® Goat antibody is monovalent, recombinant single domain antibody fused to goat IgG Fc(mutation). Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG(CH3 Fragment specific), AlpHcAbs® Goat antibody reacts with human IgG CH3 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.

Benefits

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

Application notes

WB	1:5000-1:20000
ELISA	1:10000-1:50000
ICC/IF	1:200-1:1000
IP	1-2ug/sample
Flow Cyt	1μg for 10^6 cells

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.