Anti-Human IgG-Fc PK, AlpHcAbs® Mouse antibody (Biotin)

Summary

Code	023-311-004
Immunogen	Recombinant Fc region of human IgG
Host	Alpaca pacous
Isotype	Fab of alpaca IgG1 fused to goat IgG Fc
Conjugate	Biotin
Specificity	Human IgG(Fcγ fragment specific)
Cross-Reactivity	No Cross-reactivity to rabbit, mouse, rat, goat, rhesus, and cynomolgus monkey 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-Fc PK, AlpHcAbs® Mouse antibody(Biotin) is designed for detecting human IgG specifically. Anti-Human IgG-Fc PK, AlpHcAbs® Mouse antibody(Biotin) is based on monoclonal, recombinant, mouse IgG1 Fc fused alpaca antibody to human IgG coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG-Fc PK, AlpHcAbs® Mouse antibody(Biotin) binds to the Fc part of all four human IgG subclasses without cross-binding to rabbit, mouse, rat, goat, rhesus, and cynomolgus monkey IgG. Anti-Human IgG-Fc PK, AlpHcAbs® Mouse antibody(Biotin) is a useful tool to detect, quantitate, and characterize all human IgG antibodies(subclasses 1 to 4), recombinant human IgG antibodies, human IgG-derived Fc-fusion proteins in, for instance, non-human plasma and/or serum samples like mouse, rat , rhesus, and cynomolgus monkey, thereby making it extremely suitable for setting up pharmacokinetics (PK) assays.

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	1:5000-1:20000
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.