Anti-Rat IgG(H+L), AlpHcAbs® Goat antibody

Summary

Code	071-401-001
Immunogen	Rat IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)
Conjugate	Unconjugated
Specificity	Rat IgG(H+L)
Cross-Reactivity	Does not bind to mouse IgG, rabbit IgG, goat IgG, human 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-Rat IgG(H+L), AlpHcAbs® Goat antibody is designed for detecting rat IgG specifically. Anti-Rat IgG(H+L), AlpHcAbs® Goat antibody is recombinant single domain antibody fused to goat IgG Fc(mutation). Based on immunoelectrophoresis and/or ELISA, Anti-Rat IgG(H+L), AlpHcAbs® Goat antibody reacts with rat IgG selectively, no reactivity with mouse IgG, rabbit IgG, goat IgG, human IgG.

Background

There are five antibody isotypes (IgA, IgD, IgE, IgG, and IgM) from rat. Each isotype has a different heavy chain. Rat IgG consists of four subclasses-IgG1, IgG2a, IgG2b, IgG2c. 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, and 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.
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

ELISA	1:5000-1:20000
WB	1:5000-1:20000
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.