



# Anti-Rat IgG(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Goat antibody(Biotin)

## Summary

|                  |  |
|------------------|--|
| Code             | 071-402-004  |
| Immunogen        | Rat IgG  |
| Host             | Alpaca pacous  |
| Isotype          | VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)               |
| Conjugate        | Biotin   |
| Specificity      | Rat IgG(Fcγ Fragment specific)   |
| 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 |
| Storage          | Store at -20 °C(Avoid freeze / thaw cycles)                                |

## Description

Anti-Rat IgG(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Goat antibody(Biotin) is designed for detecting rat IgG Fc fragment specifically. Anti-Rat IgG(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Goat antibody(Biotin) is based on recombinant, goat IgG Fc fused single domain antibody to rat IgG Fc fragment coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Rat IgG(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Goat antibody(Biotin) reacts with rat IgG Fc fragment selectively.

## 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

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