

## Anti-Human lambda, AlpHcAbs<sup>®</sup> Goat antibody(Biotin)

## Summary

| Code             | 023-403-004  |  |
|------------------|--|--|
| Immunogen        | Fab(lambda) region of human IgG  |  |
| Host             | Alpaca pacous  |  |
| Isotype          | VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)                                   |  |
| Conjugate        | Biotin-SP (long spacer)  |  |
| Specificity      | Human IgG lambda chain   |  |
| 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 $^{\circ}C(Avoid freeze / thaw cycles)$ , Stable for 12 months at -20 $^{\circ}C$ |  |

## Description

Anti-Human lambda, AlpHcAbs<sup>®</sup> Goat antibody(Biotin) is designed for detecting human IgG lambda light chain specifically. Anti-Human lambda, AlpHcAbs<sup>®</sup> Goat antibody(Biotin) is based on monoclonal, recombinant, goat IgG Fc fused single domain antibody to human IgG lambda light chain coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Human lambda, AlpHcAbs<sup>®</sup> Goat antibody(Biotin) reacts with human IgG lambda light chain 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 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   | Sugge  | Suggested Working Concentration                  |  |
|--|--|--|--|
| High lot-to-lot consistency<br>Increased sensitivity and higher affinity<br>Animal-free production | ELISA<br>WB<br>IP  | 1:5000-1:20000<br>1:5000-1:20000<br>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