

# Anti-Human kappa, AlpHcAbs<sup>®</sup> Goat antibody (iFluor647)

## Summary

<b>Code</b>	023-402-009
<b>Immunogen</b>	Fab region of human IgG
<b>Host</b>	Alpaca pacous
<b>Isotype</b>	VHH domain of alpaca IgG2b/2c fused to goat IgG Fc(mutation)
<b>Conjugate</b>	iFluor647(Ex: 652nm, Em: 668nm), 3 moles iFluor647 per mole IgG
<b>Specificity</b>	Human IgG kappa chain
<b>Cross-Reactivity</b>	Cross-react with cynomolgus IgG, No cross-reactivity with rabbit, mouse, rat, goat IgG
<b>Purity</b>	Recombinant Expression and Affinity purified
<b>Concentration</b>	1mg/ml
<b>Formation</b>	Liquid, 10mM PBS(pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300, 50% Glycerol
<b>Storage</b>	Store at -20 °C(Avoid freeze / thaw cycles), protect from light

## Description

Anti-Human kappa, AlpHcAbs<sup>®</sup> Goat antibody(iFluor647) is designed for detecting human IgG kappa light chain specifically. Anti-Human kappa, AlpHcAbs<sup>®</sup> Goat antibody(iFluor647) is based on monoclonal, recombinant, goat IgG Fc fused single domain antibody to human IgG kappa light chain coupled to iFluor647. Based on immunoelectrophoresis and/or ELISA, Anti-Human kappa, AlpHcAbs<sup>®</sup> Goat antibody(iFluor647) reacts with human IgG kappa 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

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

## Application notes

<b>ELISA</b>	1:5000-1:20000
<b>WB</b>	1:5000-1:20000
<b>Flow Cyt</b>	1:100-1:1000
<b>ICC/IF</b>	1:100-1:1000

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