



# Anti-Alpaca IgG2c, AlpHcAbs<sup>®</sup> Rabbit antibody (Biotin)

## Summary

Code	053-202-004
Immunogen	Recombinant Fc region of alpaca IgG2c
Host	Rabbit
Isotype	Rabbit IgG
Conjugate	Biotin-SP (long spacer)
Specificity	Alpaca IgG2c
Cross-Reactivity	No cross-reactivity with Alpaca IgG1/2b
Purity	Recombinant Expression and Affinity purified
Concentration	1mg/ml
Formation	10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Storage	Store at -20 °C(Avoid freeze / thaw cycles), Stable for 12 months at -20°C

## Description

Anti-Alpaca IgG2c, AlpHcAbs<sup>®</sup> Rabbit antibody(Biotin) is designed for detecting Alpaca IgG2c specifically. Anti-Alpaca IgG2c, AlpHcAbs<sup>®</sup> Rabbit antibody(Biotin) is based on monoclonal, recombinant, rabbit IgG Fc fused single chain antibody fragment to Alpaca IgG2c coupled to Biotin, and Anti-Alpaca IgG2c, AlpHcAbs<sup>®</sup> Rabbit antibody(Biotin) reacts with Alpaca IgG2c selectively, no cross-reactivity with Alpaca IgG1/2b.

## Background

The biological family Camelidae comprises camels (one-humped *Camelus dromedarius* and two-humped *Camelus bactrianus*), llama (*Lama glama* and *Lama guanicoe*), and vicugna (*Vicugna vicugna* and *Vicugna pacos*). Camelidae contain two kinds of IgG in serum: conventional antibodies (IgG1) containing two light chains and two heavy chains (composed of the VH, CH1, hinge, and CH2 and CH3 domains) and two types of homodimeric heavy-chain antibodies (HCAbs), IgG2 and IgG3, which comprise only H chains; each H chain contains a VHH, hinge, and CH2 and CH3 domains. The smallest intact functional antigen-binding fragment of HCAbs is the single-domain VHH, also known as a nanobody(Nb). Alpaca is also called *Vicugna pacos*. Alpaca IgG contains IgG1a, IgG1b, IgG2b, IgG2c and IgG3.

## Benefits

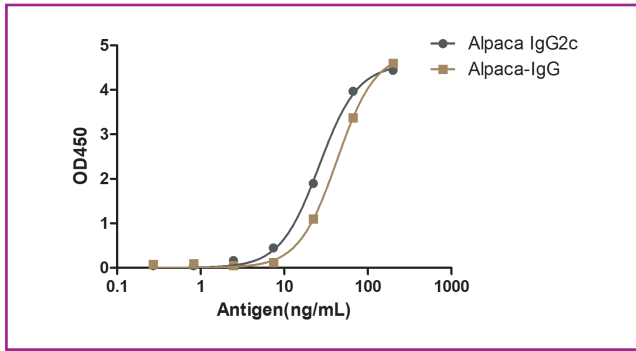
High lot-to-lot consistency  
Increased sensitivity and higher affinity  
Animal-free production

## Suggested Working Concentration

ELISA	1:4000-1:10000
WB	1:4000-1:10000

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.

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A titer ELISA of alpaca IgG2c. The plate was coated with different amounts of alpaca IgG2c or alpaca IgG. 1:4000 dilution of Anti-Alpaca IgG2c, AlpHcAbs® Rabbit antibody (Biotin) was used as the primary antibody. An HRP conjugated streptavidin as the secondary antibody.

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