

# Anti-Alpaca IgG2b(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Rabbit antibody (HRP)

## Summary

Code	053-203-005
Immunogen	Recombinant Fc region of alpaca IgG2b
Host	Camel
Isotype	VHH domain of camel IgG3 fused to rabbit IgG Fc(mutation)
Conjugate	HRP
Specificity	Alpaca IgG2b(Fcγ Fragment specific)
Cross-Reactivity	No cross-reactivity with Alpaca IgG1/2c
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 $^\circ\text{C}(\text{Avoid freeze}$ / thaw cycles), Stable for 12 months at -20 $^\circ\text{C}$

## Description

Anti-Alpaca IgG2b(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Rabbit antibody(HRP) is designed for detecting Alpaca IgG2b specifically. Anti-Alpaca IgG2b(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Rabbit antibody(HRP) is based on monoclonal, recombinant, rabbit IgG Fc fused single domain antibody to Alpaca IgG2b(Fcγ Fragment specific) coupled to HRP, and Anti-Alpaca IgG2b(Fcγ Fragment specific), AlpHcAbs<sup>®</sup> Rabbit antibody(HRP) reacts with Alpaca IgG2b selectively, no cross-reactivity with Alpaca IgG1/2c.

#### Background

The biological family Camelidae comprises camels (one-humped Camelus dromedarius and two-humped Camelus bactrianus), Ilama (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

## Application notes

WB	1:4000-1:10000
ELISA	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.

This product is for research use only and is not approved for use in humans or in clinical