

# Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin)

## Summary

Code	025-101-004
Immunogen	Recombinant Rabbit IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin-SP (long spacer)
Specificity	Fc region of Rabbit IgG
Cross-Reactivity	No cross-reactivity with mouse, human, cynomolgus, rat, goat IgG
Purity	Recombinant Expression and Affinity purified
Size	100ug
Buffer	10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Formation	Freeze-dried Powder, Store at 2-8 °C
Rehydration	Rehydrated by 100uL dH2O(Final concentration:1mg/mL)
Storage after Rehydration	-20 °C(Avoid freeze/thaw cycles), Stable for 12 months at -20°C

## Description

Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin) is designed for detecting Fc region of rabbit IgG specifically. Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin) is based on monovalent, recombinant single domain antibodies to rabbit IgG (Fcγ Fragment specific) coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin) reacts with the Fc region of rabbit IgG selectively, no reactivity with mouse, human, cynomolgus, rat, goat IgG.

## Background

Rabbit research antibodies are widely used in life science research. So far, four isotypes have been identified (IgA, IgE, IgG, and IgM) in rabbits. Each isotype has a different heavy chain. Rabbit has only one IgG subclass. 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. 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.

VHH are single-domain antibodies derived from the variable regions of heavy chain of Camelidae immunoglobulin. The size of VHH is extremely small(<15KDa) compared to other forms of antibody fragment, which significantly increase the permeability of VHH. Thus VHH is considered of great value for research, diagnostics and therapeutics.

## Benefits

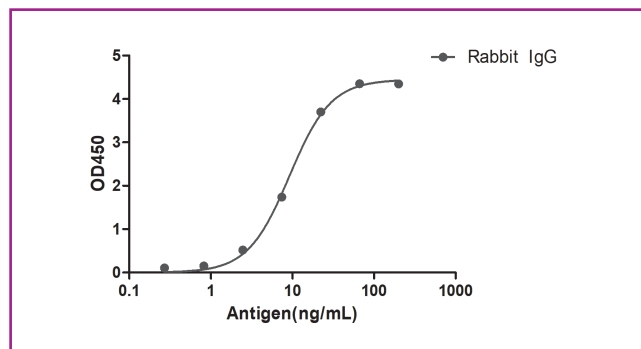
High lot-to-lot consistency  
Increased sensitivity and higher affinity  
Animal-free production

## Suggested Working Concentration

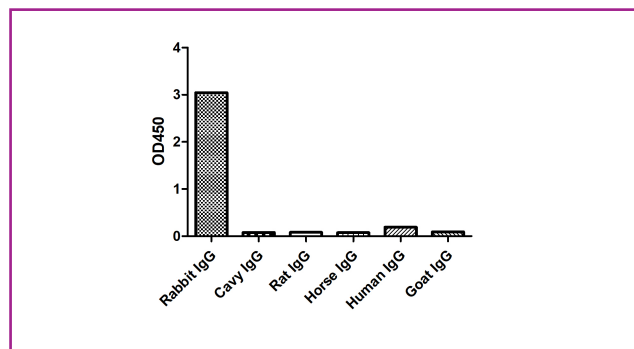
ELISA	1:10000-1:50000
WB	1:10000-1:50000

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



A titer ELISA of Rabbit IgG. The plate was coated with different amounts of Rabbit IgG. 1:10000 dilution of Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin) was used as the primary antibody. An HRP conjugated streptavidin as the secondary antibody.



ELISA of specificity for different species of IgG. The plate was coated with 2ug/ml of different IgG. 1:1000 dilution of Anti-Rabbit IgG(Fcγ Fragment specific), AlpSdAbs® VHH(Biotin) was used as the primary antibody. An HRP conjugated streptavidin as the secondary antibody.