

Anti-Humanized VHH, AlpHcAbs[®] Rabbit antibody(iFluor488)

Code	077-202-007
Immunogen	Recombinant VHH antibody from Alpaca
Host	Rabbit
Isotype	Rabbit IgG
Conjugate	iFluor488(Ex: 495nm, Em: 519nm), 3 moles iFluor488 per mole IgG
Specificity	Humanized VHH antibody(Llama, Alpaca and Camel)
Cross-Reactivity	No cross-reactivity with mouse, rat, rabbit, goat or human 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, 50% Glycerol
Storage	Store at -20 °C(Avoid freeze / thaw cycles) , Protect from light.

Description

Anti-Humanized VHH, AlpHcAbs[®] Rabbit antibody(iFluor488) is designed for detecting humanized VHH antibody(Llama, Alpaca and Camel) specifically. Based on immunoelectrophoresis and/or ELISA, Anti-Humanized VHH, AlpHcAbs[®] Rabbit antibody(iFluor488) reacts with camelid VHH antibody selectively, no cross-reactivity with mouse, rat, rabbit, goat or human IgG.

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).

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

Application notes

ELISA	1:4000-1:10000
WB	1:4000-1:10000
Flow Cyt	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.

Please note: All products are FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC PROCEDURES.