

Anti-Human IgG, AlpSdAbs[®] VHH(pHAb)

Summary

Code	023-101-013
Immunogen	Recombinant human IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	pHAb (Ex: 532nm, Em: 560nm), 2 moles pHAb per mole VHH
Specificity	Human IgG
Cross-Reactivity	Recognizes human IgG specifically, and reacts with cynomolgus IgG. No Cross-reactivity to rabbit , mouse, rat, goat IgG
Purity	Recombinant Expression and Affinity purified
Concentration	1mg/ml
Formation	Liquid, 10mM PBS (pH 7.4), 50% Glycerol
Storage	Store at -20 °C(Avoid freeze / thaw cycles), Protect from light

Description

Anti-Human IgG, AlpSdAbs[®] VHH(pHAb) is designed for studying on the internalization of antibodies. Anti-Human IgG, AlpSdAbs[®] VHH(pHAb) is based on recombinant single domain antibody to human IgG coupled to pHAb. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG, AlpSdAbs[®] VHH(pHAb) reacts with human IgG specifically. Anti-Human IgG, AlpSdAbs[®] VHH(pHAb) is an effective detection tool and can be used as a useful tool for the evaluation of antibody potency prior to ADCs.

Background

pHAb has pH-sensitive fluorescence excitation/emission spectra of 532/560 nm, and its fluorescence emission increases in intensity with increasing acidity. This increase is particularly dramatic in the range pH 4.5–9, as commonly seen within endocytic vesicles. pHAb is essentially dark in the extracellular environment; however, upon internalization, it elicits a bright fluorescent signal in the acidic environment of the endosomes.

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

Antibody Internalization Test: 2ug per 10ug test antibody

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