



# Anti-Human IgG, AlpSdAbs<sup>®</sup> VHH(pH-Red 600)

## Summary

Code	023-101-012
Immunogen	Recombinant Fc region of human IgG
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	pH-sensitive Red 600(Ex: 576nm, Em: 597nm), 2 moles Red 600 per mole VHH
Specificity	Human IgG(Fcγ fragment specific)
Cross-Reactivity	Recognizes human IgG Fcγ fragment 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<sup>®</sup> VHH(pH-Red 600) is designed for studying on the internalization of antibodies. Anti-Human IgG, AlpSdAbs<sup>®</sup> VHH(pH-Red 600) is based on recombinant single domain antibody to human IgG Fc coupled to pH-Red 600. Based on immunoelectrophoresis and/or ELISA, Anti-Human IgG, AlpSdAbs<sup>®</sup> VHH(pH-Red 600) reacts with the Fc fragment of human IgG heavy chain but not with the Fab portion of human IgG. Anti-Human IgG, AlpSdAbs<sup>®</sup> VHH(pH-Red 600) is an effective detection tool and can be used as a useful tool for the evaluation of antibody potency prior to ADCs.

## Background

pH-Red 600 has pH-sensitive fluorescence excitation/emission spectra of 576/597 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. pH-Red 600 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