

# Anti-HER2, AlpHcAbs<sup>®</sup> Human antibody

## Summary

Code	300-520-001
Immunogen	Recombinant human HER2
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to Human IgG1 Fc(mutation)
Conjugate	Unconjugated
Specificity	Human HER2
Cross-Reactivity	Cross-reactivity with cynomolgus HER2
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), Stable for 12 months at -20°C

## Description

Anti-HER2, AlpHcAbs<sup>®</sup> Human antibody is designed for detecting human HER2 specifically. Anti-HER2, AlpHcAbs<sup>®</sup> Human antibody is recombinant VHH domain of alpaca IgG2b/2c fused to Human IgG1 Fc. Based on ELISA, Anti-HER2, AlpHcAbs<sup>®</sup> Human antibody reacts with human HER2, and has reactivity with cynomolgus HER2.

## Background

HER2, also known as ErbB2 and Neu, is a 185-kDa transmembrane glycoprotein that is a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. It has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Amplification and/or overexpression of HER2 have been reported in numerous cancers, including breast and ovarian tumors. HER2 is a therapeutic target for the treatment of breast cancer and other carcinomas.

Using antibody with Fc(mutation), the background from Fc receptors will be eliminated.

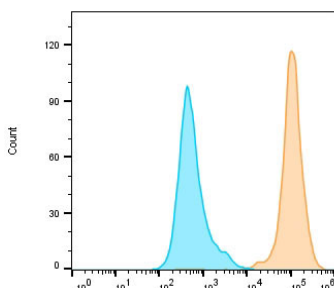
## Benefits

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

## Suggested Working Concentration

ELISA	1:4,000-1:10000
Flow Cytometry	1:200-1:1000

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.



Flow cytometric analysis of HER2-overexpressed HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) labeling HER2 with 300-520-001 at 1:10000 dilution(yellow) compared with Human IgG1-Isotype control(green). Anti-Human IgG(H+L),HcAbs<sup>®</sup> Goat antibody(FITC)(023-403-006), at 1/1000 dilution was used as the secondary antibody.

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