

Anti-CD33, AlpHcAbs[®] Human antibody

Summary

Code	300-521-001
Immunogen	Recombinant human CD33
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to Human IgG1 Fc(mutation)
Conjugate	Unconjugated
Specificity	Human CD33
Cross-Reactivity	Cross-reactivity with cynomolgus CD33
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-CD33, AlpHcAbs[®] Human antibody is designed for detecting human CD33 specifically. Anti-CD33, AlpHcAbs[®] Human antibody is recombinant VHH domain of alpaca IgG2b/2c fused to Human IgG1 Fc. Based on ELISA, Anti-CD33, AlpHcAbs[®] Human antibody reacts with human CD33, and has reactivity with cynomolgus CD33.

Background

CD33 is a transmembrane protein of the sialic acid-binding immunoglobulin-like lectin (Siglec) family. It belongs to the immunoreceptor tyrosine-based inhibitory motif (ITIM)-containing molecules able of recruiting protein tyrosine phosphatases SHP-1 and SHP-2 to signal assemblies, and these ITIMs are also used for ubiquitin-mediated removal of the receptor from the cell surface. CD33 is expressed on cells of myelomonocytic lineage, binds sialic acid residues in N- and O-glycans on cell surfaces, and is a therapeutic target for acute myeloid leukemia. Further, CD33 is found on granulocyte and macrophage precursors in the bone marrow, but is not on pluripotent stem cells. CD33 is also expressed on, and is a useful marker for, peripheral monocytes. CD33 is useful for distinguishing myelogenous leukemia cells from lymphoid or erythroid leukemias. Diseases associated with CD43 dysfunction include gallbladder lymphoma and extracutaneous mastocytoma.

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

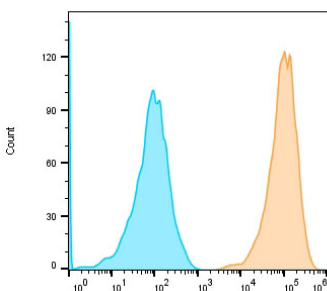
Benefits

- 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 CD33-overexpressed HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) labeling CD33 with 300-521-001 at 1:10000 dilution(yellow) compared with Human IgG1-Isotype control(green). Anti-Human IgG(H+L),HcAbs[®] 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