ARG70263
Human CD33 recombinant protein (ECD) (Fc-His-tagged, C-ter)

Package: 100 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, Fc-His-tagged (C-ter) Human CD33 recombinant protein (ECD).
Tested Reactivity	Hu
Tested Application	Binding, ELISA, SDS-PAGE
Target Name	CD33 (ECD)
Species	Human
A.A. Sequence	Asp18 - His259 of Human CD33 (NP_001763.3) with an Fc-6X His tag at the C-terminus.
Expression System	HEK293
Alternate Names	p67; Sialic acid-binding Ig-like lectin 3; SIGLEC-3; CD antigen CD33; gp67; Siglec-3; Myeloid cell surface antigen CD33; SIGLEC3

Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Human CD33 at 2 µg/ml (100 µl/well) can bind Anti-Human CD33 Antibody with a linear range of 8-20 ng/ml.

Properties

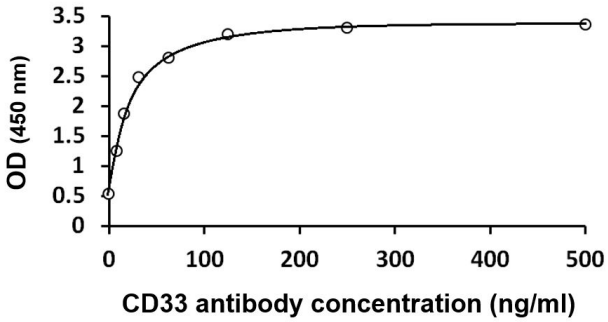
Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 97% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD33
Gene Full Name	CD33 molecule
Function	Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state (PubMed:10611343, PubMed:15597323, PubMed:11320212). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). Upon engagement of ligands such as C1q or syalylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK (PubMed:28325905, PubMed:10887109). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10556798,

	PubMed:10206955, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:15597323). [UniProt]
Calculated Mw	40 kDa
PTM	Phosphorylation of Tyr-340 is involved in binding to PTPN6 and PTPN11. Phosphorylation of Tyr-358 is involved in binding to PTPN6. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG70263 Human CD33 recombinant protein (ECD) (Fc-His-tagged, C-ter) ELISA image

ELISA: The plate was coated with ARG70263 Human CD33 recombinant protein (ECD) (Fc-His-tagged, C-ter) at 2 µg/ml (100 µl/well). Samples were detected with serially diluted anti-CD33 antibody.

ARG70263 Human CD33 recombinant protein (ECD) (Fc-His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70263 Human CD33 recombinant protein (ECD) (Fc-His-tagged, C-ter).