

Synonym

CD33,SIGLEC3,gp67

Source

Human Siglec-3 Protein, Llama IgG2b Fc Tag(CD3-H5259) is expressed from human 293 cells (HEK293). It contains AA Asp 18 - His 259 (Accession # AAH28152.1).

Predicted N-terminus: Asp 18

Molecular Characterization

Siglec-3(Asp 18 - His 259) AAH28152.1 LlamaFc(Glu1 - Ser243) AAX73259.1

This protein carries a llama IgG2b Fc tag at the C-terminus.

The protein has a calculated MW of 54.6 kDa. The protein migrates as 64-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Application

Please note that there may be a cross-reaction between anti-human IgG Fc antibodies and llama IgG Fc tag, also between anti-llama IgG Fc antibodies and human IgG Fc tag.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

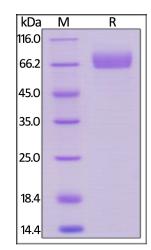
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

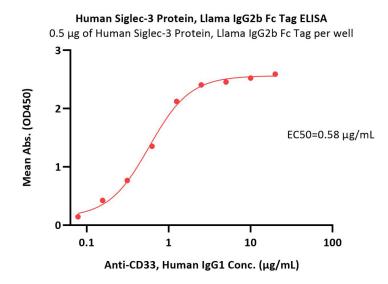


Human Siglec-3 Protein, Llama IgG2b Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

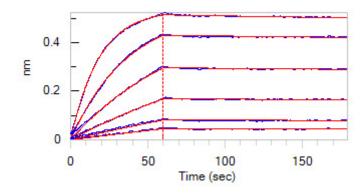






Immobilized Human Siglec-3 Protein, Llama IgG2b Fc Tag (Cat. No. CD3-H5259) at 5 μ g/mL (100 μ L/well) can bind Anti-CD33, Human IgG1 with a linear range of 0.078-1.25 μ g/mL (QC tested).

Bioactivity-BLI



Loaded Siglec-3 MAb (Mouse IgG1) on AMC Biosensor, can bind Human Siglec-3 Protein, Llama IgG2b Fc Tag (Cat. No. CD3-H5259) with an affinity constant of 0.365 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Myeloid cell surface antigen CD33 is also known as SIGLEC3, Siglecs (sialic acid binding Iglike lectins) and GP67, is a single-pass type I membrane protein which belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. Human CD33 / Siglec-3 cD encodes a 364 amino acid (aa) polypeptide with a hydrophobic signal peptide, an N-terminal Ig-like V-type domain, one Ig-like C2-type domains, a transmembrane region and a cytoplasmic tail. CD33 / Siglec-3 usually considered myeloid-specific, but it can also be found on some lymphoid cells. In the immune response, CD33 / Siglec-3 may act as an inhibitory receptor upon ligand induced tyrosine phosphorylation by recruiting cytoplasmic phosphatase(s) via their SH2 domain(s) that block signal transduction through dephosphorylation of signaling molecules. CD33 / Siglec-3 induces apoptosis in acute myeloid leukemia.

