

**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
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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.

**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.*

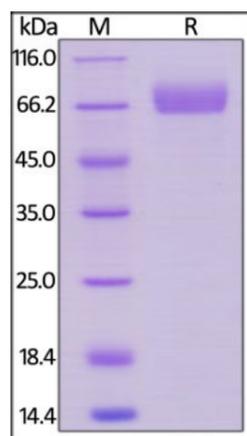
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

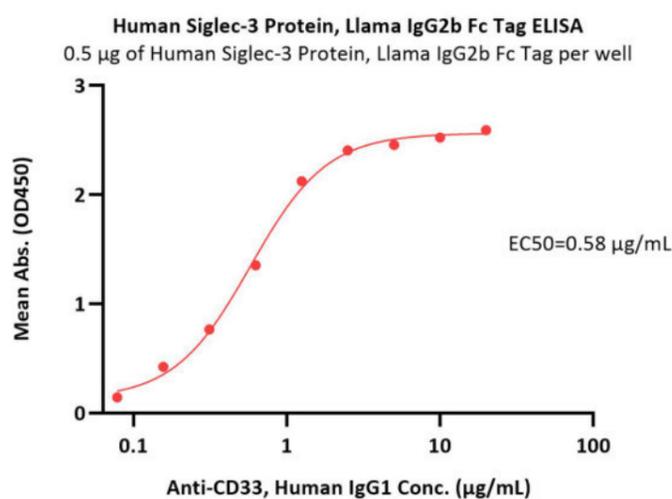
This product is stable after storage at:

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

**SDS-PAGE**

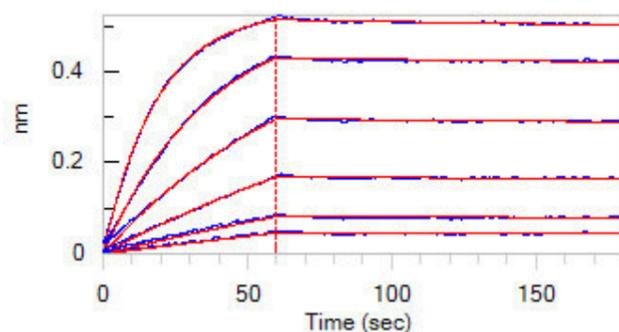
Human Siglec-3 Protein, Llama IgG2b Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



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

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.