Synonym

CD33,SIGLEC3,gp67

Source

Human Siglec-3, Fc Tag(CD3-H5257) 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	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 52.9 kDa. The protein migrates as 64-85 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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

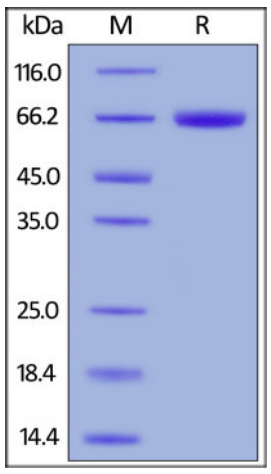
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

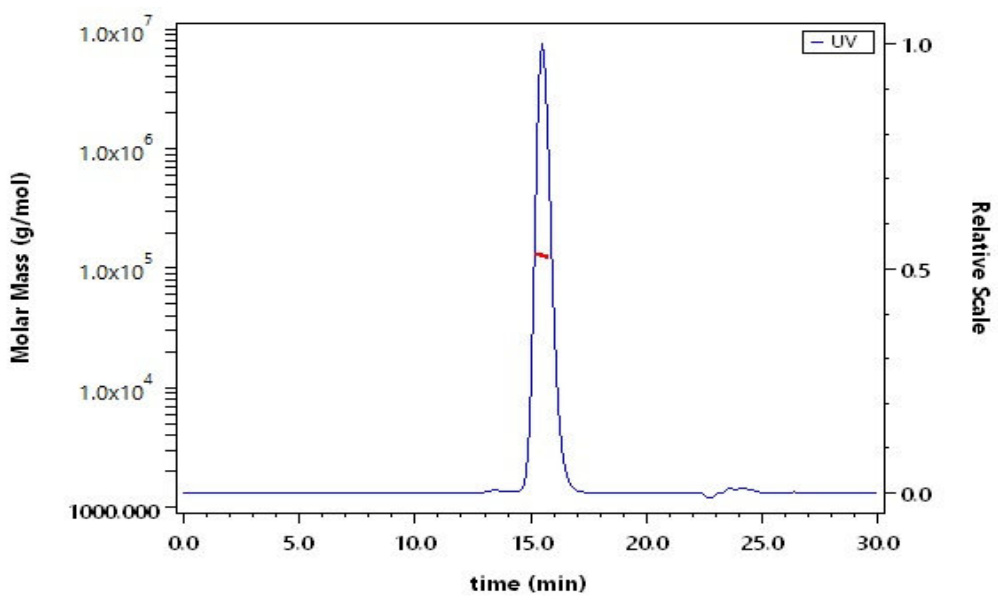
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



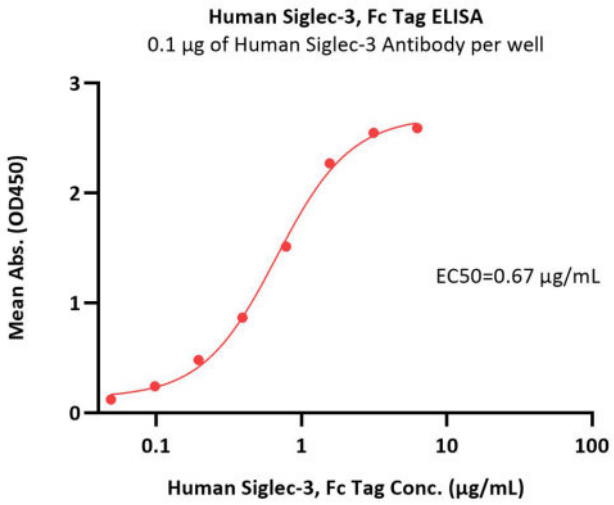
Human Siglec-3, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



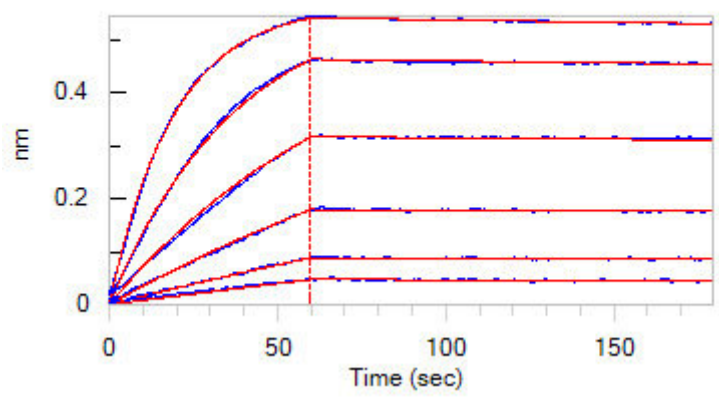
The purity of Human Siglec-3, Fc Tag (Cat. No. CD3-H5257) is more than 95% and the molecular weight of this protein is around 115-145 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human Siglec-3 Antibody at 1 μg/mL (100 μL/well) can bind Human Siglec-3, Fc Tag (Cat. No. CD3-H5257) with a linear range of 0.2-2 ng/mL (QC tested).

Bioactivity-BLI



Loaded Siglec-3 MAb (Mouse IgG1) on AMC Biosensor, can bind Human Siglec-3, Fc Tag (Cat. No. CD3-H5257) with an affinity constant of 0.329 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 cDNA 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.