

**Synonym**

CD33,SIGLEC3,gp67

**Source**

Rat Siglec-3, His Tag(CD3-R52H4) is expressed from human 293 cells (HEK293). It contains AA Asp 18 - Gln 240 (Accession # [F1LTZ3-1](#)).

Predicted N-terminus: Asp 18

**Molecular Characterization**

Siglec-3(Asp 18 - Gln 240) F1LTZ3-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 26.7 kDa. The protein migrates as 37-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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.*

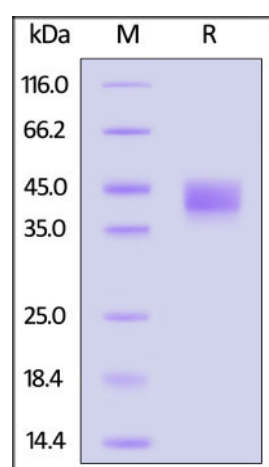
**Storage**

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

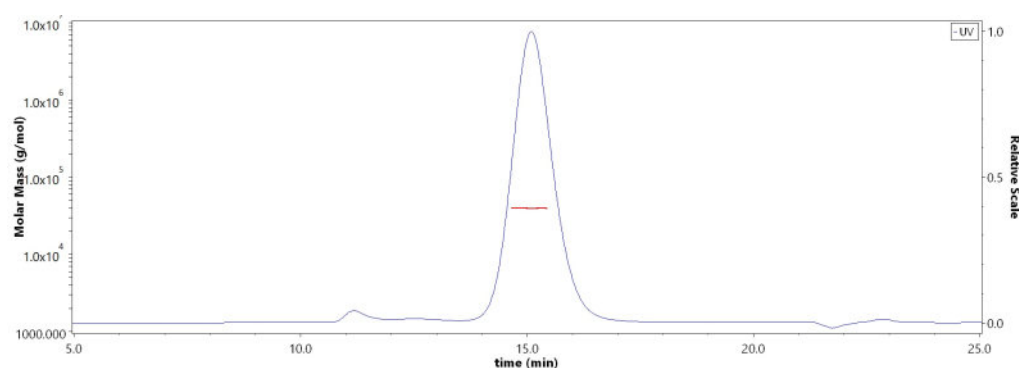
*Please avoid repeated freeze-thaw cycles.*

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.

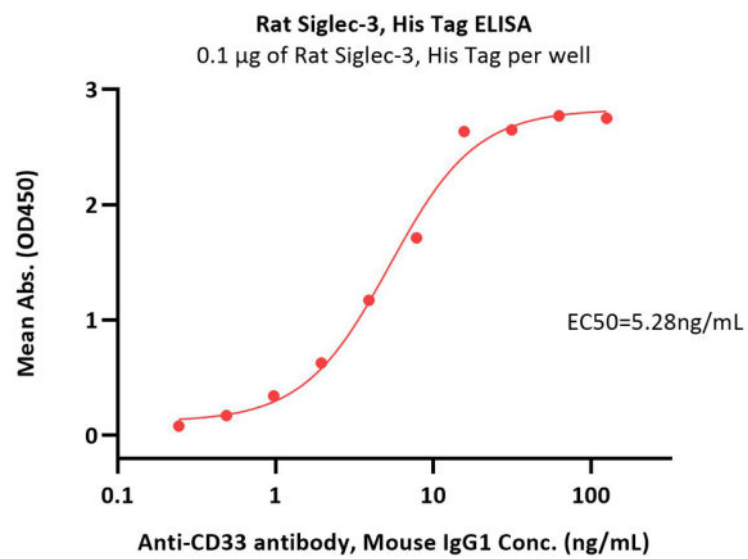
**SDS-PAGE**

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

**Bioactivity-ELISA****SEC-MALS**

The purity of Rat Siglec-3, His Tag (Cat. No. CD3-R52H4) is more than 90% and the molecular weight of this protein is around 32-47 kDa verified by SEC-MALS.

[Report](#)



Immobilized Rat Siglec-3, His Tag (Cat. No. CD3-R52H4) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-CD33 antibody, Mouse IgG1 with a linear range of 0.2-16 ng/mL (QC 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.