

## **Synonym**

CD33,SIGLEC3,gp67

#### Source

Human Siglec-3 (R119G), Fc Tag(CD3-H5254) is expressed from human 293 cells (HEK293). It contains AA Asp 18 - His 259 (Accession # <u>AAH28152.1</u> (R119G)).

Predicted N-terminus: Asp 18

### **Molecular Characterization**

Siglec-3 (Asp 18 - His 259) Fc(Pro 100 - Lys 330)
AAH28152.1 P01857

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

The protein has a calculated MW of 53.1 kDa. The protein migrates as 64-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 0.2 EU per µg by the LAL method.

# **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM 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**

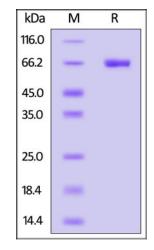
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**

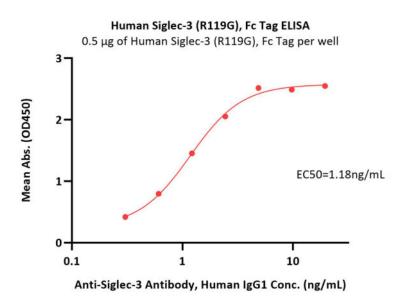


Human Siglec-3 (R119G), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**







Immobilized Human Siglec-3 (R119G), Fc Tag (Cat. No. CD3-H5254) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-Siglec-3 Antibody, Human IgG1 with a linear range of 0.3-2 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**

