

### Synonym

CD33 antigen-like 3,SIGLEC-15,CD33L3,sialic acid-binding Ig-like lectin 15,Siglec15,Siglec-15

#### Source

Rhesus macaque Siglec-15 Protein, Fc Tag(SG5-C5253) is expressed from human 293 cells (HEK293). It contains AA Phe 20 - Thr 263 (Accession # F7ETM4).

Predicted N-terminus: Phe 20

### **Molecular Characterization**

Siglec-15(Phe 20 - Thr 263)	Fc(Pro 100 - Lys 330)
F7ETM4	P01857

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

The protein has a calculated MW of 52.7 kDa. The protein migrates as 60-65 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.

#### **Formulation**

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

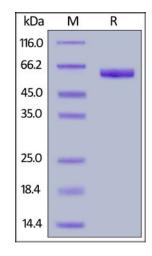
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**

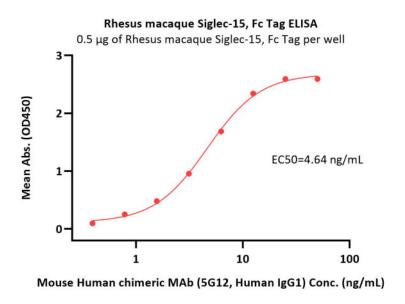


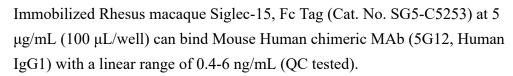
Rhesus macaque Siglec-15 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

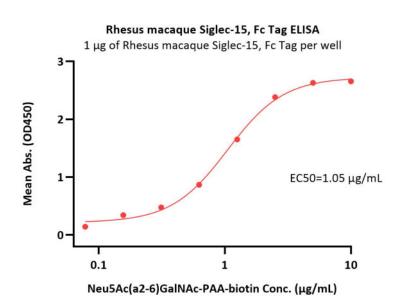
## **Bioactivity-ELISA**





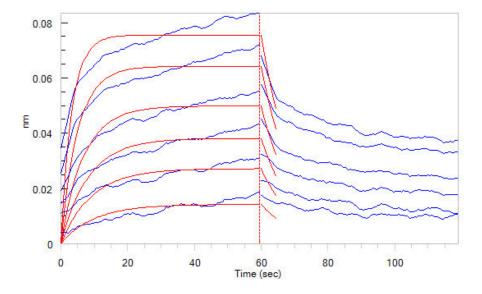






Immobilized Rhesus macaque Siglec-15, Fc Tag (Cat. No. SG5-C5253) at 10  $\mu$ g/mL (100  $\mu$ L/well) on Diamond Protein A Protein, His Tag precoated (0.5  $\mu$ g/well) plate, can bind Neu5Ac(a2-6)GalNAc-PAA-biotin with a linear range of 0.078-1.25  $\mu$ g/mL (Routinely tested).

# **Bioactivity-BLI**



Loaded Rhesus macaque Siglec-15 Protein, Fc Tag (Cat. No. SG5-C5253) on ProteinA Biosensor, can bind Neu5Ac(a2-6)GalNAc-PAA-biotin with an affinity constant of 0.62  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

# Background

Siglec-15 is a DAP12-associated immunoreceptor, which belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. Siglecs are cell surface proteins that bind sialic acid. They are found primarily on the surface of immune cells and are a subset of the I-type lectins. Siglec-15 consisting of immunoglobulin (Ig)-like domains, transmembrane domain and a short cytoplasmic tail. Siglec-15 is that recognizes sialylated glycans and regulates osteoclast differentiation. Siglec-15 is a potential therapeutic target for osteoporosis and plays a conserved regulatory role in the immune system of vertebrates.

### **Clinical and Translational Updates**

