

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 μ g by the LAL method / rFC 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

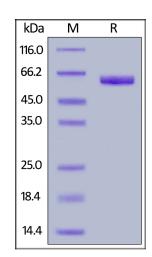
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

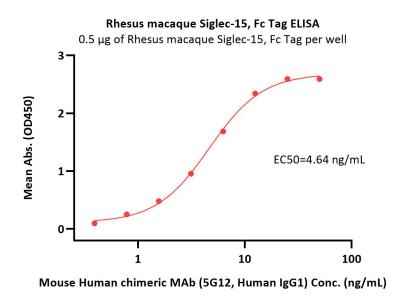


Rhesus macaque Siglec-15 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

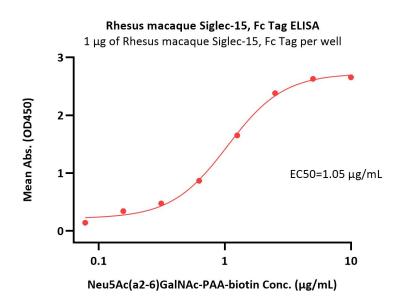
Bioactivity-ELISA





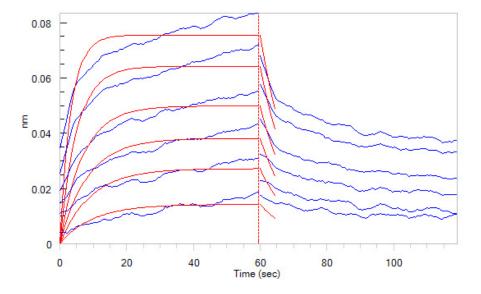


Immobilized Rhesus macaque Siglec-15, Fc Tag (Cat. No. SG5-C5253) at 5 $\mu g/mL$ (100 $\mu L/well)$ can bind Mouse Human chimeric MAb (5G12, Human IgG1) with a linear range of 0.4-6 ng/mL (QC tested).



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

