



Synonym

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

Source

Human Siglec-15, Fc Tag(SG5-H5253) is expressed from human 293 cells (HEK293). It contains AA Phe 20 - Thr 263 (Accession # [Q6ZMC9-1](#)).
Predicted N-terminus: Phe 20

Molecular Characterization

Siglec-15(Phe 20 - Thr 263) Q6ZMC9-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 53.0 kDa. The protein migrates as 55-60 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 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

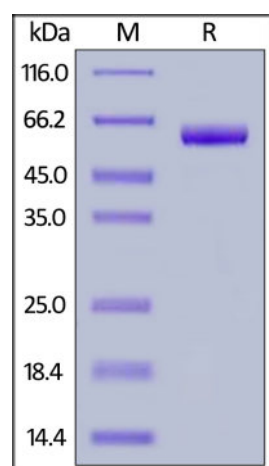
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE

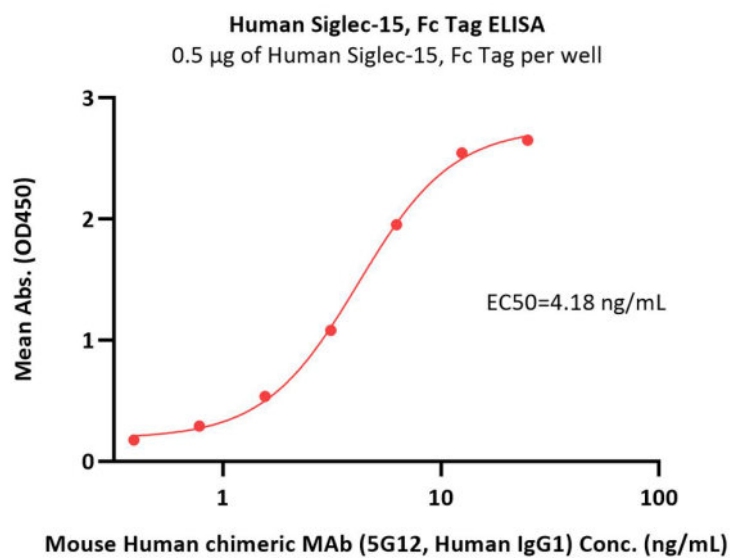


Human Siglec-15, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

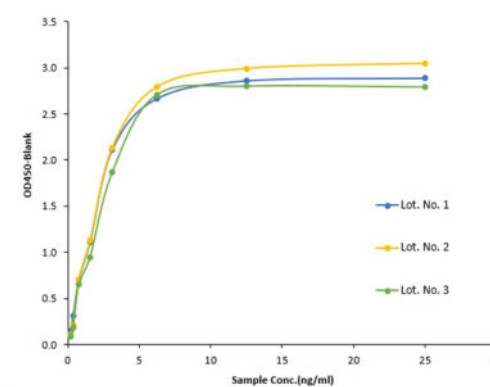
Discounts, Gifts,
and more!



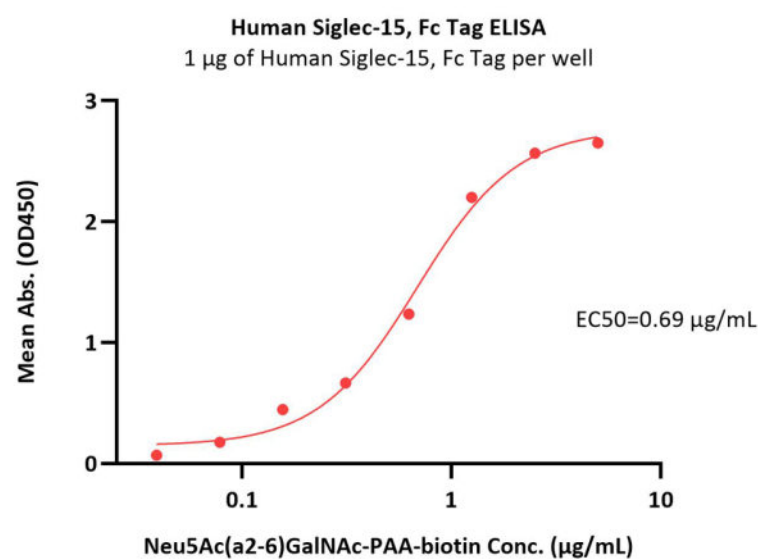


Immobilized Human Siglec-15, Fc Tag (Cat. No. SG5-H5253) at 5 µg/mL (100 µL/well) can bind Mouse Human chimeric MAb (5G12, Human IgG1) with a linear range of 0.4-6 ng/mL (QC tested).

Batch consistency

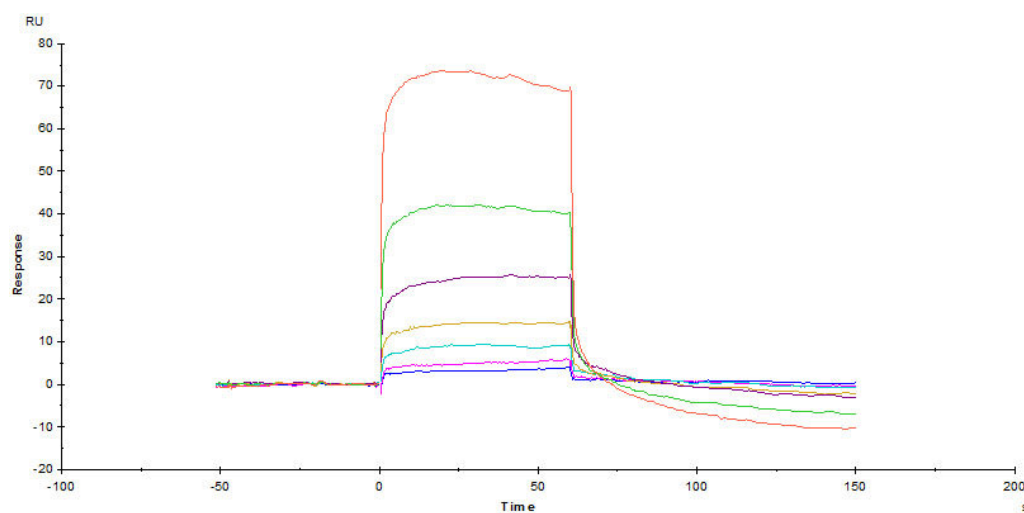


Lot. No.	EC50(µg/mL)
Lot. No. 1	0.0021
Lot. No. 2	0.0020
Lot. No. 3	0.0023



Immobilized Human Siglec-15, Fc Tag (Cat. No. SG5-H5253) at 10 µg/mL (100 µL/well) on Diamond Protein A Protein, His Tag precoated (0.5 µg/well) plate, can bind Neu5Ac(a2-6)GalNAc-PAA-biotin with a linear range of 0.078-1.25 µg/mL (Routinely tested).

Bioactivity-SPR

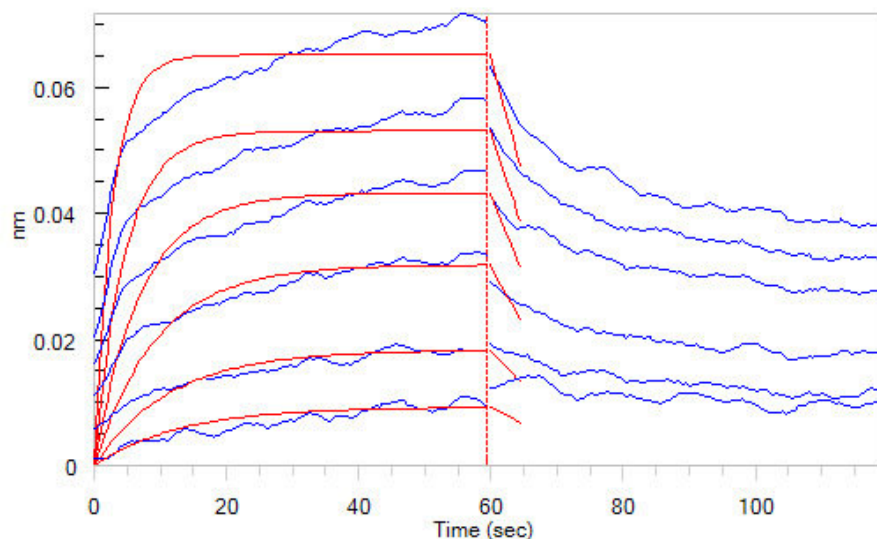


Immobilized Neu5Ac(a2-6)GalNAc-PAA-biotin on SA Chip can bind Human Siglec-15, Fc Tag (Cat. No. SG5-H5253) with an affinity constant of 4.49 µM as determined in a SPR assay (Biacore T200) (Routinely tested).

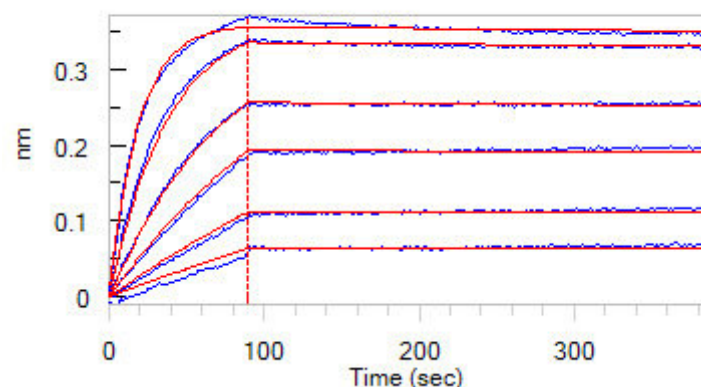
Bioactivity-BLI

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and more!





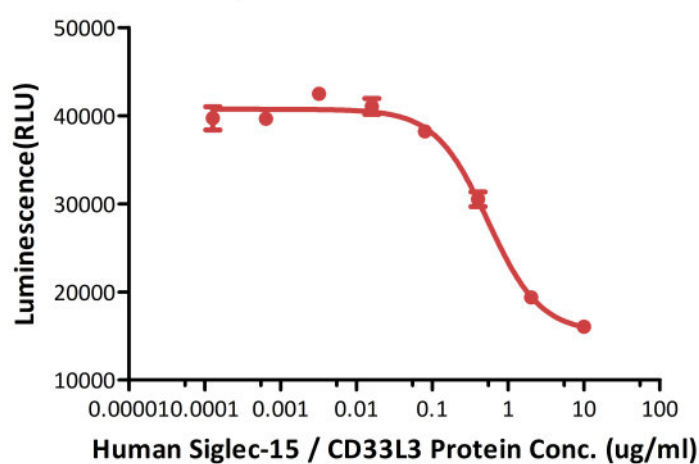
Loaded Human Siglec-15, Fc Tag (Cat. No. SG5-H5253) on ProteinA Biosensor, can bind Neu5Ac(a2-6)GalNAc-PAA-biotin with an affinity constant of 0.78 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Anti-Siglec-15 MAb (Mouse IgG) on AMC Biosensor, can bind Human Siglec-15, Fc Tag (Cat. No.SG5-H5253) with an affinity constant of 59.7 pM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-Bioactivity CELL BASE

Human Siglec-15 / CD33L3 Protein inhibits anti-CD3-induced proliferation of PBMC



Human Siglec-15, Fc Tag (Cat. No. SG5-H5253) inhibits Anti-CD3-induced proliferation of PBMC. The ED50 for this effect is 0.46-0.54 μ g/mL (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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

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