

Synonym

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

Source

Mouse Siglec-15, His Tag(SG5-M52H7) is expressed from human 293 cells (HEK293). It contains AA Arg 24 - Thr 262 (Accession # <u>A7E1W8-1</u>). Predicted N-terminus: Arg 24

Molecular Characterization

Siglec-15(Arg 24 - Thr 262) A7E1W8-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 27.5 kDa. The protein migrates as 33-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS with Arginine, 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

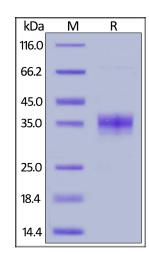
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Mouse Siglec-15, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

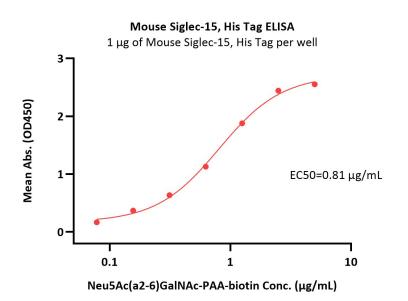
Bioactivity-ELISA







Immobilized Mouse Siglec-15, His Tag (Cat. No. SG5-M52H7) at 5 μ g/mL (100 μ L/well) can bind Monoclonal Anti-Human Siglec-15 (5G12) Antibody, Human IgG1 with a linear range of 0.3-5 ng/mL (QC tested).



Immobilized Mouse Siglec-15, His Tag (Cat. No. SG5-M52H7) at $10 \mu g/mL$ ($100 \mu L/well$) can bind Neu5Ac(a2-6)GalNAc-PAA-biotin with a linear range of 0.078- $1.25 \mu g/mL$ (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.

