Human Siglec-2 / CD22 (176-687) Protein, His Tag (MALS verified)

Catalog # SI2-H52H8

Synonym

CD22,SIGLEC2,BL-CAM,SIGLEC-2,Siglec2,SIGLEC2FLJ22814

Source

Human Siglec-2 (176-687) Protein, His Tag(SI2-H52H8) is expressed from human 293 cells (HEK293). It contains AA Trp 176 - Arg 687 (Accession # P20273-1).

Molecular Characterization

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

The protein has a calculated MW of 59.1 kDa. The protein migrates as 80-90 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

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

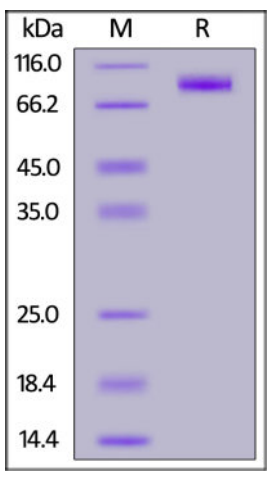
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

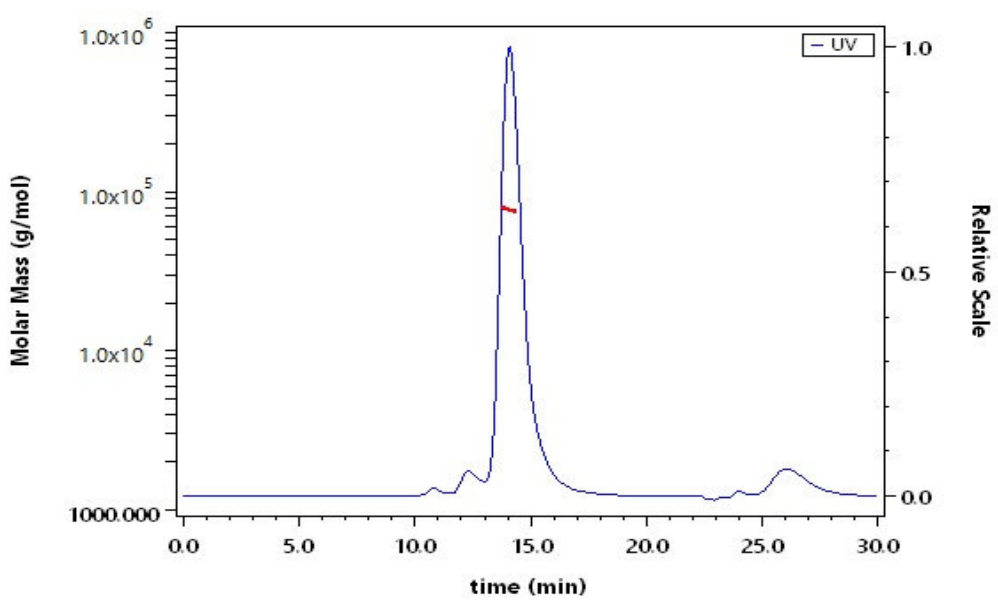
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



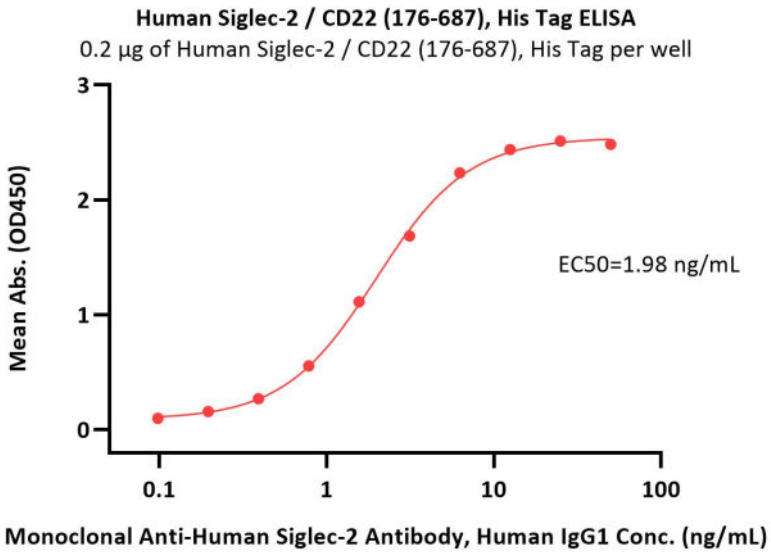
Human Siglec-2 (176-687) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



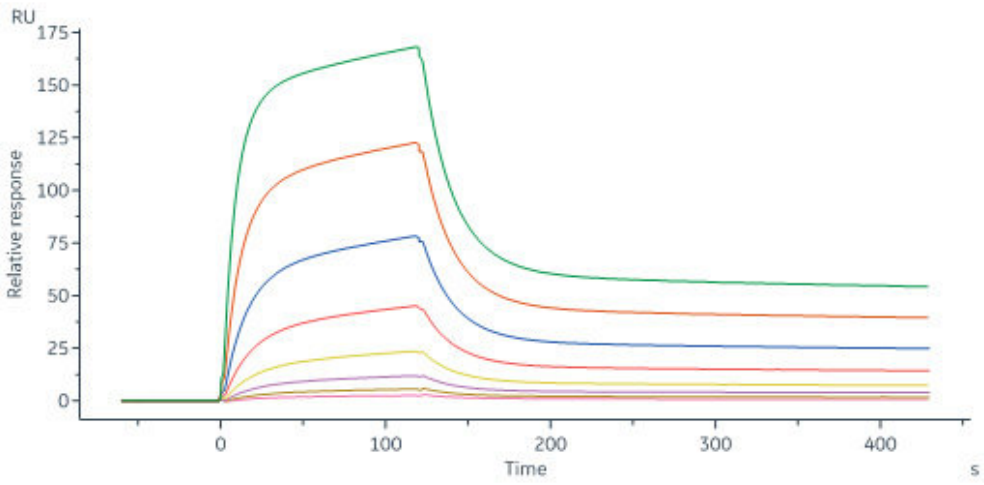
The purity of Human Siglec-2 (176-687) Protein, His Tag (Cat. No. SI2-H52H8) is more than 90% and the molecular weight of this protein is around 67-90 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



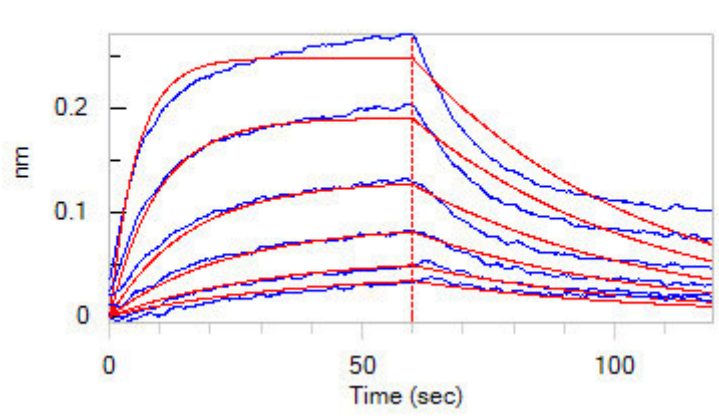
Immobilized Human Siglec-2 / CD22 (176-687), His Tag (Cat. No. SI2-H52H8) at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-Human Siglec-2 Antibody, Human IgG1 with a linear range of 0.1-6 ng/mL (QC tested).

Bioactivity-SPR



Monoclonal Anti-Human Siglec-2 Antibody, Human IgG1 captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human Siglec-2 (176-687), His Tag (Cat. No. SI2-H52H8) with an affinity constant of 0.121 μM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity-BLI



Loaded Monoclonal Anti-Human CD22 Antibody, Human IgG1 on AHC Biosensor, can bind Human Siglec-2 / CD22 (176-687), His Tag (Cat. No. SI2-H52H8) with an affinity constant of 53 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

B-cell receptor CD22 is also known as Sialic acid-binding Ig-like lectin 2 (Siglec-2), B-lymphocyte cell adhesion molecule (BL-CAM), T-cell surface antigen Leu-14, which belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. CD22 mediates B-cell B-cell interactions, and may be involved in the localization of B-cells in lymphoid tissues. Siglec-2 / CD22 binds sialylated glycoproteins, one of which is CD45. Siglec2 / CD22 plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.