

Synonym

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

Source

Human Siglec-2, His Tag(CD2-H52H8) is expressed from human 293 cells (HEK293). It contains AA Asp 20 - Arg 687 (Accession # P20273-1). Predicted N-terminus: Asp 20

Molecular Characterization

Siglec-2(Asp 20 - Arg 687) P20273-1

Poly-his

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

The protein has a calculated MW of 77.03 kDa. The protein migrates as 90-116 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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

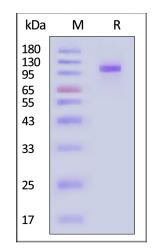
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 6 months under sterile conditions after reconstitution.

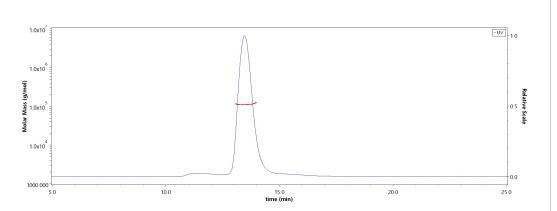
SDS-PAGE



Human Siglec-2, 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% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

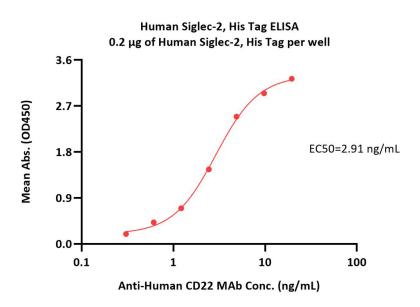
SEC-MALS



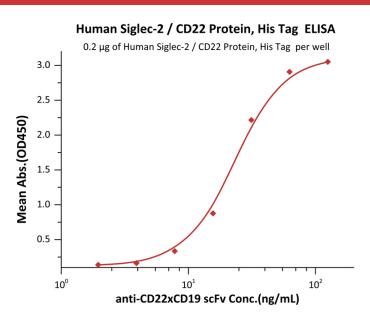
The purity of Human Siglec-2, His Tag (Cat. No. CD2-H52H8) is more than 90% and the molecular weight of this protein is around 100-125 kDa verified by SEC-MALS.

Report



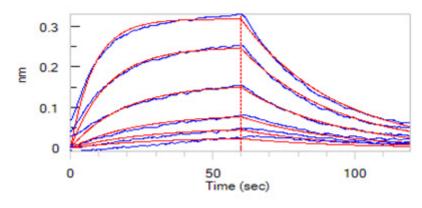


Immobilized Human Siglec-2, His Tag (Cat. No. CD2-H52H8) at 2 μ g/mL (100 μ L/well) can bind Anti-Human CD22 MAb with a linear range of 0.3-5 ng/mL (QC tested).



Immobilized Human Siglec-2, His Tag (Cat. No. CD2-H52H8) at 2 μ g/mL, add increasing concentrations of anti-CD22xCD19 scFv and then add Biotinylated Human CD19 (20-291), Fc,Avitag at 0.2 μ g/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 3.9 ng/mL (Routinely tested).

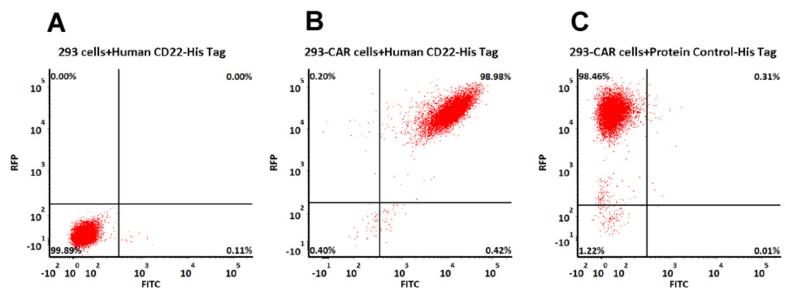
Bioactivity-BLI



Loaded Anti-Human CD22 MAb (human IgG1) on AHC Biosensor, can bind Human Siglec-2, His Tag (Cat. No. CD2-H52H8) with an affinity constant of 133 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Evaluation of CAR expression

FACS Analysis of Anti-CD22 CAR Expression





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





293 cells were transfected with anti-CD22-scFv and RFP tag. 2e5 of the cells were first stained with B. Human Siglec-2, His Tag (Cat. No. CD2-H52H8, 3 μg/mL) and C. His Tag Protein Control, followed by FITC Anti-6xHis Tag Antibody. A. Non-transfected 293 cells and C. His Tag Protein Control were used as negative control. RFP was used to evaluate CAR (anti-CD22-scFv) expression and FITC was used to evaluate the binding activity of Human Siglec-2, His Tag (Cat. No. CD2-H52H8).

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.

