Biotinylated Human Siglec-2 / CD22 Protein, Fc Tag, premium grade, ultra sensitivity (primary amine labeling)

Catalog # CD2-H5254





Synonym

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

Source

Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling(CD2-H5254) is expressed from human 293 cells (HEK293). It contains AA Asp 20 - Arg 687 (Accession # P20273-1).

Predicted N-terminus: Asp 20

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

Siglec-2(Asp 20 - Arg 687) Fc(Pro 100 - Lys 330)
P20273-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 101.6 kDa. The protein migrates as 139 kDa±5 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Host Cell Protein

<0.5 ng/μg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/μg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from $0.22~\mu m$ 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:

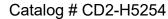
- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

SEC-MALS

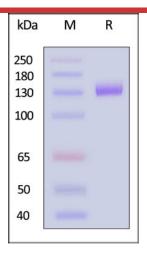


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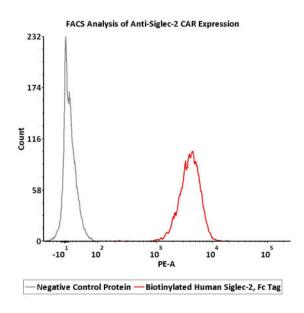






Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

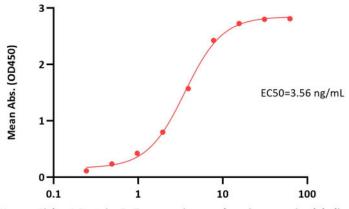
Bioactivity-FACS



2e5 of anti-Siglec-2 CAR-293 cells were stained with 100 μL of 0.3 μg/mL of Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling (Cat. No. CD2-H5254) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

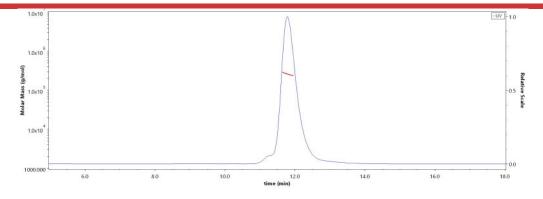
Bioactivity-ELISA

Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling ELISA 0.1 µg of Monoclonal Anti-Human CD22 Antibody, Human IgG1 per well



Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling Conc. (ng/mL)

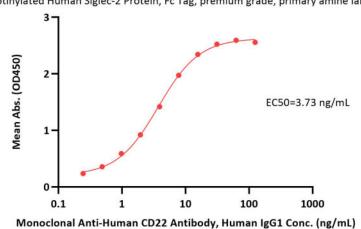
Immobilized Monoclonal Anti-Human CD22 Antibody, Human IgG1 at 1 μg/mL (100 μL/well) can bind Biotinylated Human Siglec-2 Protein, Fc Tag,



The purity of Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling (Cat. No. CD2-H5254) is more than 90% and the molecular weight of this protein is around 235-285 kDa verified by SEC-MALS.

Report

Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling ELISA $0.1\,\mu g$ of Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling per well



Immobilized Biotinylated Human Siglec-2 Protein, Fc Tag, premium grade, primary amine labeling (Cat. No. CD2-H5254) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind



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premium grade, primary amine labeling (Cat. No. CD2-H5254) with a linear range of 0.2-8 ng/mL (QC tested).

Monoclonal Anti-Human CD22 Antibody, Human IgG1 with a linear range of 0.2-16 ng/mL (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.

Clinical and Translational Updates

