

Synonym

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

Source

FITC-Labeled Human Siglec-2, Fc Tag (CD2-HF254) is expressed from human 293 cells (HEK293). It contains AA Asp 20 - Arg 687 (Accession # [P20273-1](#)). It is the FITC labeled form of Human Siglec-2, Fc Tag (Cat. No. CD2-H5253). Predicted N-terminus: Asp 20

Molecular Characterization

Siglec-2(Asp 20 - Arg 687) P20273-1	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 101.6 kDa. The protein migrates as 130-150 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 3.5-5.5.

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

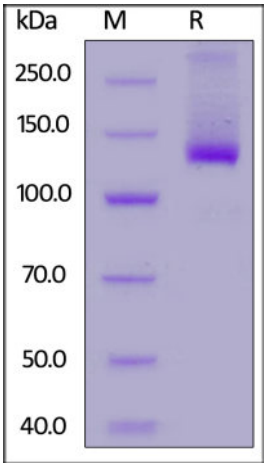
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

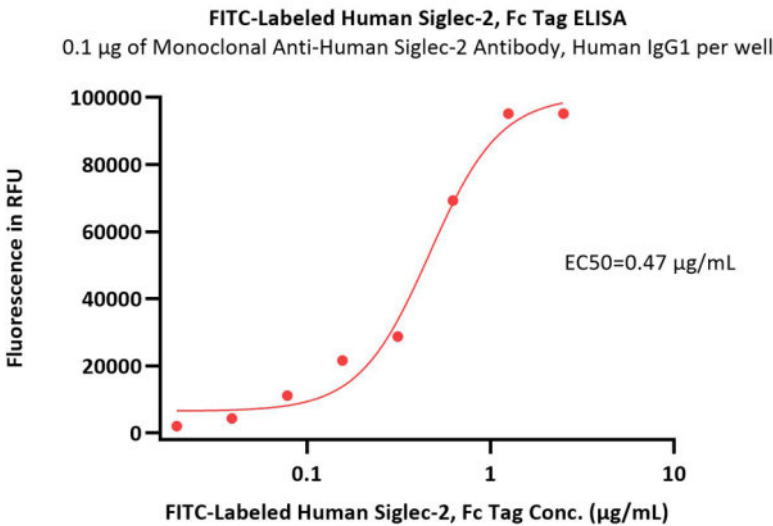
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



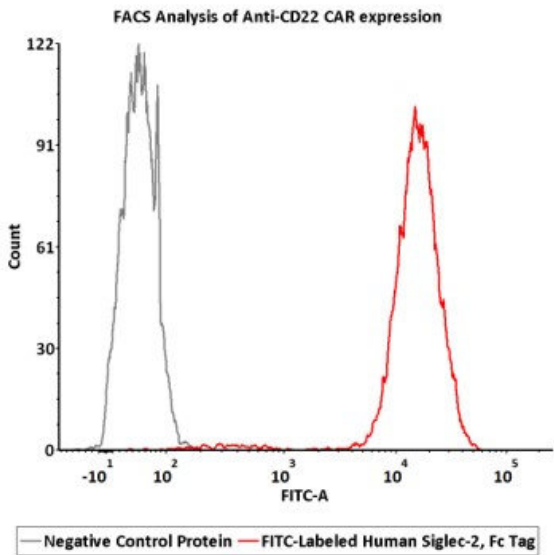
FITC-Labeled Human Siglec-2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Monoclonal Anti-Human Siglec-2 Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human Siglec-2, Fc Tag (Cat. No. CD2-HF254) with a linear range of 0.1-2.5 µg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-CD22 CAR-293 cells were stained with 100 µL of 10 µg/mL of FITC-Labeled Human Siglec-2, Fc Tag (Cat. No.CD2-HF254) and negative control protein respectively, FITC signal was used to evaluate the binding activity (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

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