

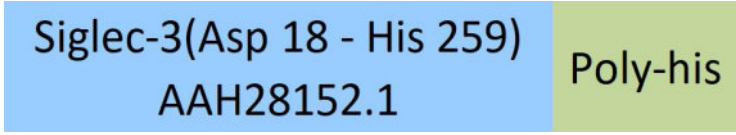
Synonym

CD33,SIGLEC3,gp67

Source

FITC-Labeled Human Siglec-3, His Tag (CD3-HF224) is expressed from human 293 cells (HEK293). It contains AA Asp 18 - His 259 (Accession # [AAH28152.1](#)). It is the FITC labeled form of Human Siglec-3, His Tag (CD3-H5226).

Predicted N-terminus: Asp 18

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 27.6 kDa. The protein migrates as 40-55 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 1.5-3.5.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% 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.

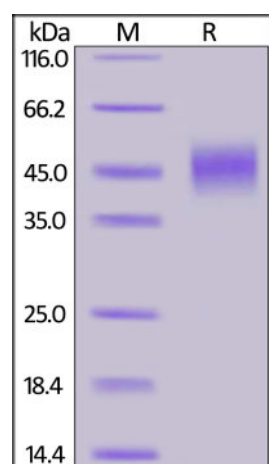
Storage

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.

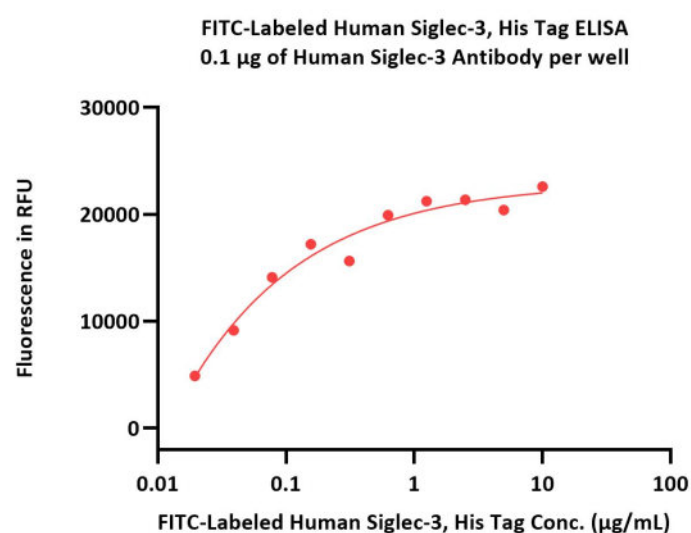
This product is stable after storage at:

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

SDS-PAGE

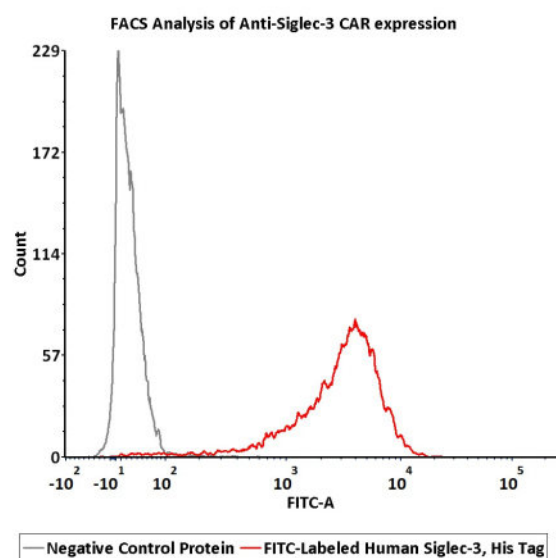
FITC-Labeled Human Siglec-3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human Siglec-3 Antibody at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human Siglec-3, His Tag (Cat. No. CD3-HF224) with a linear range of 0.02-0.625 µg/mL (QC tested).

Bioactivity-FACS



2e5 of anti-Siglec-3 CAR-293 cells were stained with 100 µL of 1 µg/mL of FITC-Labeled Human Siglec-3, His Tag (Cat. No. CD3-HF224) and negative control protein respectively, FITC signal was used to evaluate the binding activity (QC tested).

Background

Myeloid cell surface antigen CD33 is also known as SIGLEC3, Siglecs (sialic acid binding Iglike lectins) and GP67, is a single-pass type I membrane protein which belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. Human CD33 / Siglec-3 cDNA encodes a 364 amino acid (aa) polypeptide with a hydrophobic signal peptide, an N-terminal Ig-like V-type domain, one Ig-like C2-type domains, a transmembrane region and a cytoplasmic tail. CD33 / Siglec-3 usually considered myeloid-specific, but it can also be found on some lymphoid cells. In the immune response, CD33 / Siglec-3 may act as an inhibitory receptor upon ligand induced tyrosine phosphorylation by recruiting cytoplasmic phosphatase(s) via their SH2 domain(s) that block signal transduction through dephosphorylation of signaling molecules. CD33 / Siglec-3 induces apoptosis in acute myeloid leukemia.

Clinical and Translational Updates

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