

Synonym

CD33,SIGLEC3,gp67

Source

PE-Labeled Human Siglec-3, His Tag (CD3-HP2E3) is produced via site-specific conjugation of PE to Human Siglec-3, His Tag under optimal conditions with a proprietary technology. Human Siglec-3, His Tag is expressed from human 293 cells (HEK293). It contains AA Asp 18 - His 259 (Accession # [AAH28152.1](#)).

Predicted N-terminus: Asp 18

Molecular Characterization

Siglec-3(Asp 18 - His 259) AAH28152.1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 29.4 kDa.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Application

Evaluation of anti-CD33 CAR expression by flow cytometry. Please note that this product is NOT compatible to streptavidin detection system.

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, 0.5% BSA, 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.

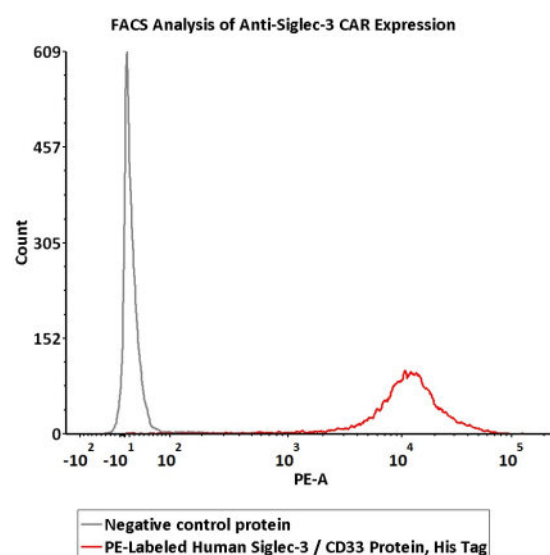
Storage

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.

Bioactivity-FACS

5×10^5 of anti-Siglec-3 CAR-293 cells were stained with 100 μ L of 1:50 dilution (2 μ L stock solution in 100 μ L FACS buffer) of PE-Labeled Human Siglec-3, His Tag (Cat. No. CD3-HP2E3) and negative control protein respectively. PE 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 cD 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.