

Synonym

CD33,SIGLEC3,gp67

Source

Human Siglec-3 (18-132), Fc Tag (CD3-H5255) is expressed from human 293 cells (HEK293). It contains AA Pro 18 - His 132 (Accession # P20138-3).

Predicted N-terminus: Pro 18

Molecular Characterization

Siglec-3(Pro 18 - His 132) P20138-3	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 38.6 kDa. The protein migrates as 46-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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 50 mM Tris, 100 mM Glycine, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

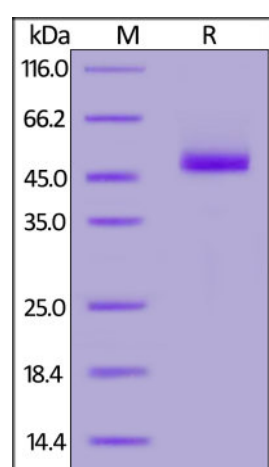
Storage

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 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Siglec-3 (18-132), Fc Tag on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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.

References

- (1) [Garnache-Ottou F, et al., 2005, Blood 105 \(3\): 1256–64.](#)
- (2) [Hernández-Caselles T, et al., 2006, J. Leukoc. Biol. 79 \(1\): 46–58.](#)
- (3) [Walter RB, et al., 2007, Blood 109 \(10\): 4168–70.](#)
- (4) [Ulyanova, T. et al., 1999, Eur. J. Immunol. 29:3440.](#)
- (5) [Crocker, P.R. and A. Varki, 2001, Immunology 103:137.](#)

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