Human Siglec-7 / CD328 Protein, Fc (L118A, G120A, E201A) Tag (MALS verified)

Catalog # SI7-H5257

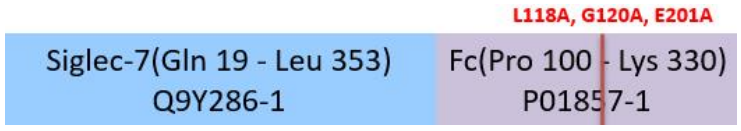
Synonym

CDw328,D-siglec,A79 membrane protein,p75,Adhesion inhibitory receptor molecule 1, AIRM-1

Source

Human Siglec-7, Fc (L118A, G120A, E201A) Tag(SI7-H5257) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Leu 353 (Accession # Q9Y286-1).
Predicted N-terminus: Gln 19

Molecular Characterization



This protein carries a Fc (L118A, G120A, E201A) tag at the C-terminus. The protein has a calculated MW of 63.3 kDa. The protein migrates as 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation. Mutations (L118A, G120A, E201A /EU number: L235A/G237A/E318A) in human immunoglobulin G1 (hIgG1) Fc strongly reduce binding of the Fc mutant to cell expressed FcγRs, resulting in an almost 4-fold reduction in ADCC compared to that of wild type human IgG1.

Endotoxin

Less than 0.01 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 25 mM MES, 150 mM NaCl 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

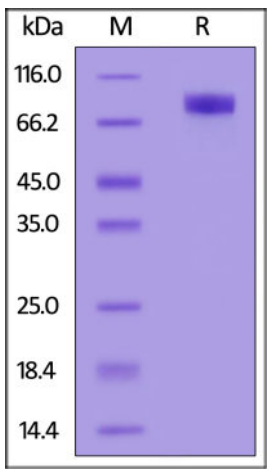
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

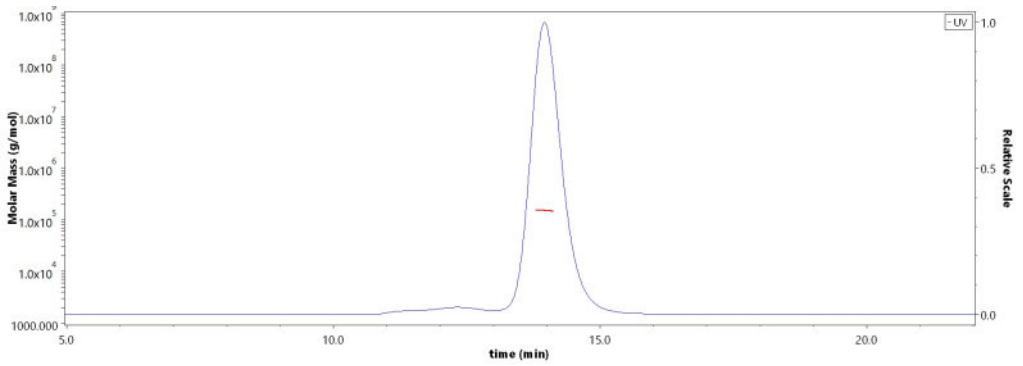
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



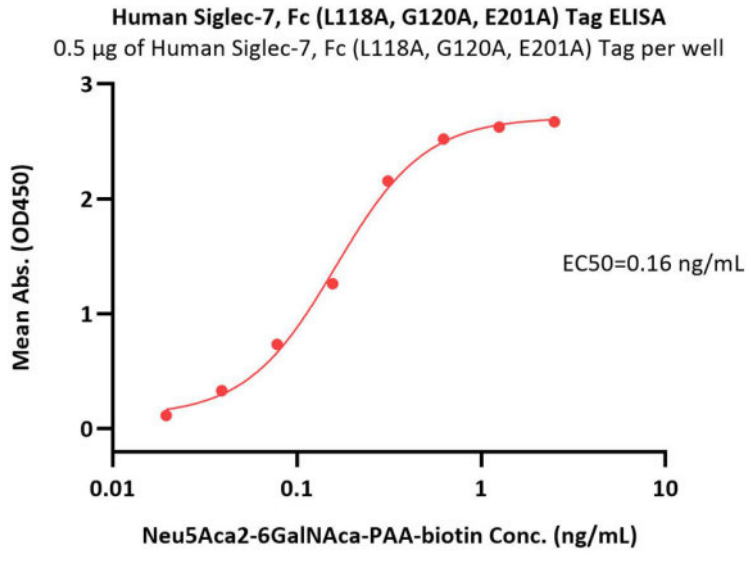
Human Siglec-7, Fc (L118A, G120A, E201A) Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human Siglec-7, Fc (L118A, G120A, E201A) Tag (Cat. No. SI7-H5257) is more than 90% and the molecular weight of this protein is around 140-170 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human Siglec-7, Fc (L118A, G120A, E201A) Tag (Cat. No. SI7-H5257) at 5 μg/mL (100 μL/well) can bind Neu5Aca2-6GalNAca-PAA-biotin with a linear range of 0.02-0.313 ng/mL (QC tested).

Background

Siglec-7 is a member of the human CD33-related Siglec receptor. The extracellular region of Siglec-7 is characterized by an N-terminal V-set Ig domain that can bind sialic acid and two C2-set Ig domains. The cytoplasmic tail of Siglec-7 has one immune-receptor tyrosine-based inhibitory motif (ITIM) and one ITIM-like motif. Siglec-7 is considered as a sialic acid-dependent immunoreceptor with inhibitory potential and expressed predominantly on human NK cells, monocytes and a small subset of CD8+ T cells.

Clinical and Translational Updates

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