Biotinylated Human Siglec-7 / CD328 Protein, His,Avitag™ (MALS & SPR verified)

Catalog # SG7-H82E7

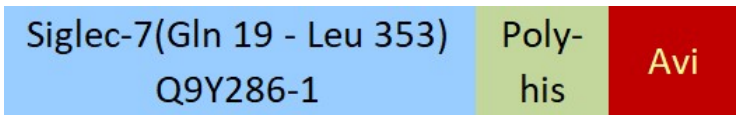
Synonym

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

Source

Biotinylated Human Siglec-7, His,Avitag(SG7-H82E7) 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 polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 40.5 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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, pH5.5 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

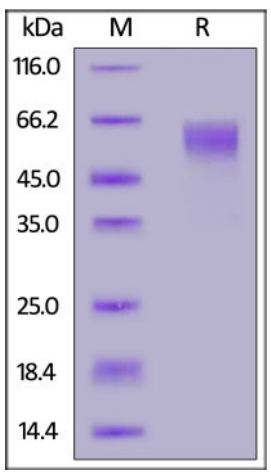
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

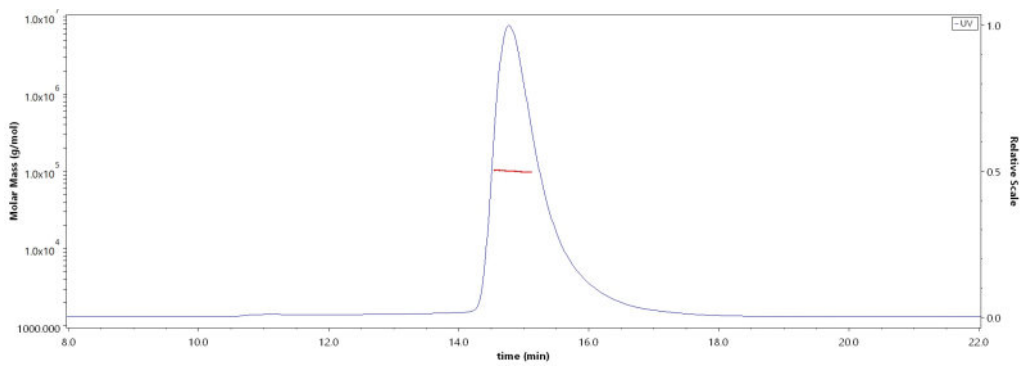
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



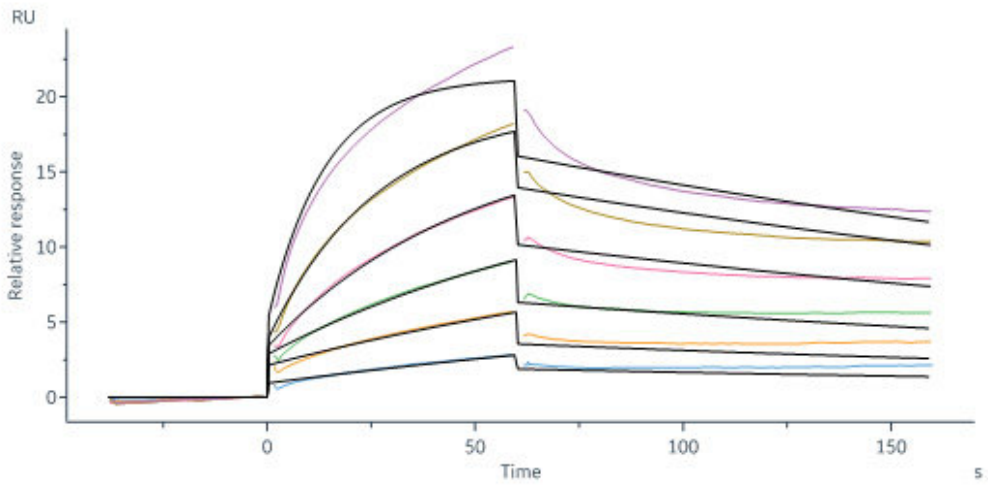
Biotinylated Human Siglec-7, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Human Siglec-7, His,Avitag (Cat. No. SG7-H82E7) is more than 90% and the molecular weight of this protein is around 88-112 kDa verified by SEC-MALS.
Report

Bioactivity-SPR



Biotinylated Human Siglec-7, His,Avitag (Cat. No. SG7-H82E7) immobilized on CM5 Chip can bind Neu5Aca2-6GalNAca-PAA-biotin with an affinity constant of 29.2 nM as determined in a SPR assay (Biacore 8K) (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.