

**Synonym**

SIGLEC10,MGC126774,PRO940,Siglec10,SLG2

**Source**

Human Siglec-10, Fc (L118A, G120A, E201A) Tag(SI0-H5255) is expressed from human 293 cells (HEK293). It contains AA Met 17 - Thr 546 (Accession # [Q96LC7-1](#)).

Predicted N-terminus: Met 17

**Molecular Characterization**

L118A, G120A, E201A	
Siglec-10 (Met 17 - Thr 546) Q96LC7-1	Fc(Pro 100 - Lys 330) P01857-1

This protein carries a human IgG1 Fc (L118A, G120A, E201A) tag at the C-terminus. The protein has a calculated MW of 84.6 kDa. As the result of the mutations for Fc-Tag, the protein migrates as 90-110 kDa (Siglect-10 with Fc-Tag), 60-67 kDa (Siglect-10) and 30-32 kDa (Fc fragment) 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 1.0 EU per µg by the LAL method.

**Purity**

>85% 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.*

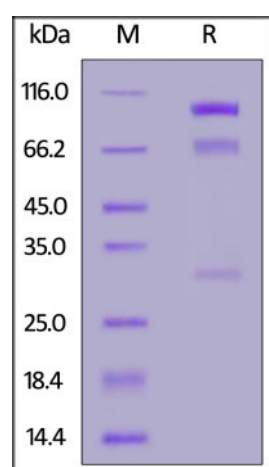
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

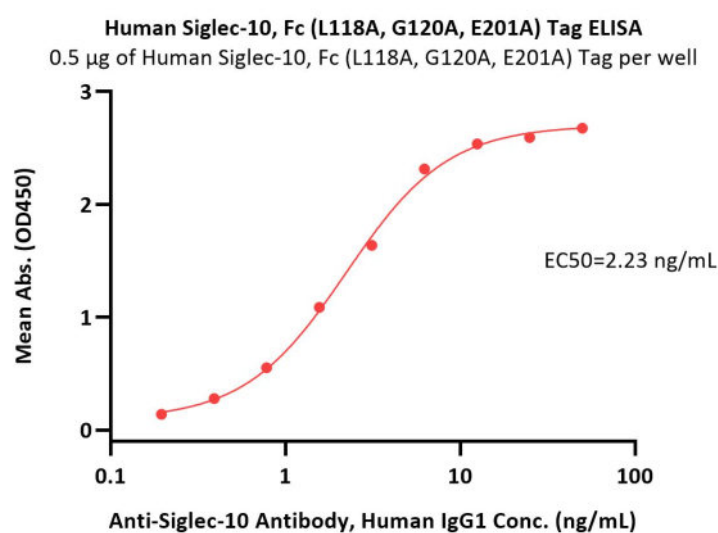
This product is stable after storage at:

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

**SDS-PAGE**

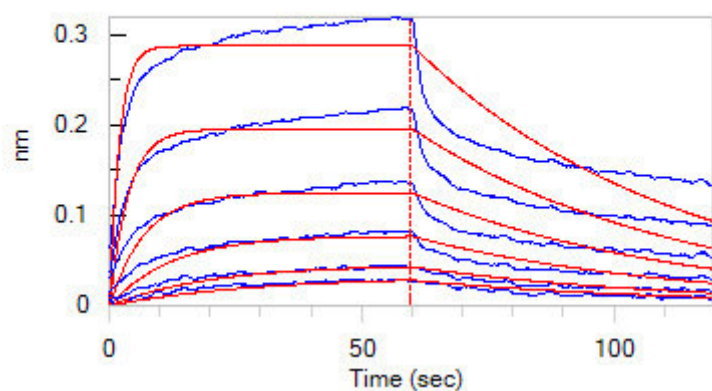
Human Siglec-10, Fc (L118A, G120A, E201A) Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85%.

**Bioactivity-ELISA**

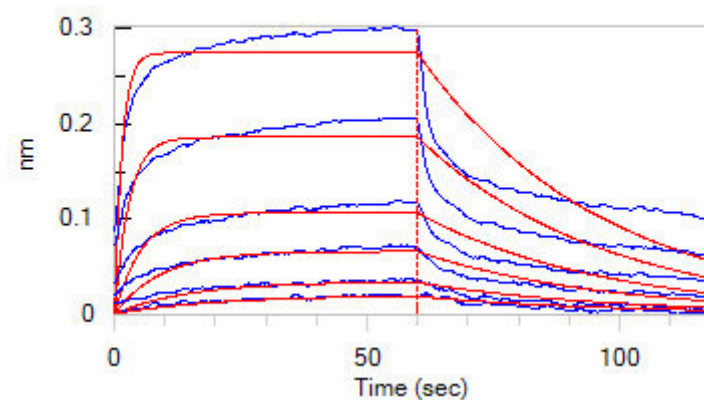


Immobilized Human Siglec-10, Fc (L118A, G120A, E201A) Tag (Cat. No. SI0-H5255) at 5 µg/mL (100 µL/well) can bind Anti-Siglec-10 Antibody, Human IgG1 with a linear range of 0.2-6 ng/mL (QC tested).

### Bioactivity-BLI



Loaded Human CD32a (R167), His Tag (Cat. No. CDA-H5221) on HIS1K Biosensor, can bind Human Siglec-10, Fc (L118A, G120A, E201A) Tag (Cat. No. SI0-H5255) with an affinity constant of 37.5 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human CD64, His Tag (Cat. No. FCA-H52H1) on HIS1K Biosensor, can bind Human Siglec-10, Fc (L118A, G120A, E201A) Tag (Cat. No. SI0-H5255) with an affinity constant of 42.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Background

The siglecs (sialic acid-binding Ig-like lectins) are a distinct subset of the Ig superfamily with adhesion-molecule-like structure. We describe here a novel member of the siglec protein family that shares a similar structure including five Ig-like domains, a transmembrane domain, and a cytoplasmic tail containing two ITIM-signaling motifs. Siglec-10 was identified through database mining of an asthmatic eosinophil EST library. The Siglec-10-VAP-1 interaction seems to mediate lymphocyte adhesion to endothelium and has the potential to modify the inflammatory microenvironment via the enzymatic end products.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.