

## Siglec-10 Protein, Human (HEK293, His)

<b>Cat. No.:</b>	HY-P76642
<b>Synonyms:</b>	Sialic acid-binding Ig-like lectin 10; Siglec-10; SIGLEC10; SLG2
<b>Species:</b>	Human
<b>Source:</b>	HEK293
<b>Accession:</b>	AAI01726.1 (M17-N550)
<b>Gene ID:</b>	89790
<b>Molecular Weight:</b>	Approximately 87.43 kDa

### PROPERTIES

#### AA Sequence

MDGRFWIRVQ	ESVMVPEGLC	ISVPCSF SYP	RQDWTGSTPA
YGYWFKAVTE	TTKGAPVATN	HQSREVE MST	RGRFQLTGDP
AKGNCSLVIR	DAQMQDESQY	FFRVERGSYV	RYNFMNDGFF
LKVTALTQKP	DVYIPETLEP	GQPVTVICVF	NWAFEECPPP
SFSWTGAALS	SQGTKPTTSH	FSVLSFTPRP	QDHNTDLTCH
VDFSRKGVSV	QRTVRLRVAY	APRDLVISIS	RDNTPALEPQ
PQGNVPYLEA	QKGQFLRLLC	AADSQPPATL	SWVLQNRVLS
SSHPWGP RPL	GLELPGVKAG	DSGRYTCRAE	NRLGSQQRAL
DLSVQYPPEN	L RVMVSQANR	TVLENLGNGT	SLPVLEGQSL
CLVCVTHSSP	PARLSWTQRG	QVLSPSQPSD	PGVLELPRVQ
VEHEGEFTCH	ARHPLGSQH V	SLSLSVHYS P	KLLGPSCSWE
AEGLHCSCSS	QASPAPSLRW	WLGEELEGN	SSQDSFEVTP
SSAGPWANSS	LSLHGGLSSG	LRLRCEAWN V	HGAQSGSILQ
LPDKKGLIST	A FSN		

**Biological Activity** Immobilized Human Siglec-10 at 2 µg/mL (100 µL/well) can bind Anti-Siglec-10 Antibody, the ED<sub>50</sub> for this effect is 21.31 ng/mL.

**Appearance** Lyophilized powder

**Formulation** Lyophilized from a 0.2 µm filtered solution of 20 mM Tris, 500 mM NaCl, 0.2% CHAPS, 10% trehalose, 0.1 M Arg, pH 8.0 or 20 mM Tris, 500 mM NaCl, pH 8.0.

**Endotoxin Level** <1 EU/µg, determined by LAL method.

**Reconstitution** It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

**Storage & Stability** Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

**Shipping**

Room temperature in continental US; may vary elsewhere.

**DESCRIPTION****Background**

Siglec-10 protein, recognized as a putative adhesion molecule, functions in sialic-acid dependent cellular binding, displaying a preference for alpha-2,3- or alpha-2,6-linked sialic acid. The sialic acid recognition site of Siglec-10 may undergo masking due to cis interactions with sialic acids on the same cell surface. In immune responses, it appears to act as an inhibitory receptor, inducing ligand-induced tyrosine phosphorylation and recruiting cytoplasmic phosphatases via their SH2 domains, blocking signal transduction through dephosphorylation of signaling molecules. Siglec-10 is involved in the negative regulation of B-cell antigen receptor signaling, dependent on PTPN6/SHP-1. In association with CD24, it may participate in the selective suppression of the immune response to danger-associated molecular patterns (DAMPs) such as HMGB1, HSP70, and HSP90. Siglec-10, in collaboration with CD24, regulates the immune response of natural killer (NK) cells and plays a role in the control of autoimmunity. During the initiation of adaptive immune responses by CD8-alpha(+) dendritic cells, Siglec-10 inhibits cross-presentation by impairing the formation of MHC class I-peptide complexes, implicating the recruitment of PTPN6/SHP-1 and promoting phagosomal acidification. Siglec-10 interacts with various proteins, including PTPN6/SHP-1, NCF1, CD24, HMGB1, RIGI, CBL, and PTPN11.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA