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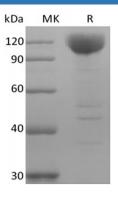
Recombinant Human Siglec-10 (C-Fc-Avi) Biotinylated

Catalog Number: PKSH033985

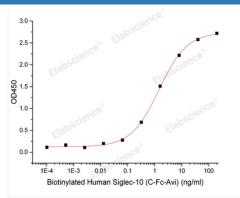
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	HEK293 Cells-derived Human Siglec-10 protein Met17Thr546, with an C-terminal Fc
	& Avi
Calculated MW	86.9 kDa
Observed MW	100-130 kDa
Accession	Q96LC7
Bio-activity	Immobilized Anti-Human Siglec10 mAb at 1μ g/ml (100 μ l/well) can bind Biotinylated
	Human Siglec-10-Fc-Avi(Cat#PKSH033985). The ED ₅₀ of Biotinylated Human
	Siglec-10-Fc-Avi is 1. 45 ng/ml.
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.

Data



> 95 % as determined by reducing SDS-PAGE.



Immobilized Anti-Human Siglec10 mAb at 1µg/ml (100 µl/well) can bind Biotinylated Human Siglec-10-Fc-Avi(Cat#PKSH033985). The ED50 of Biotinylated Human Siglec-10-Fc-Avi is 1. 45 ng/ml.

Background

Tel:400-999-2100

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Siglecs (sialic acid binding Ig-like lectins) are I-type lectins that belong to the immunoglobulin superfamily. They are characterized by an N-terminal Ig-like V-type domain which mediates sialic acid binding, followed by a varying number of Ig-like C2-type domains. Siglecs 5-11 constitute the CD33/Siglec-3 related group, and are differentially expressed in the hematopoietic system. Siglec-G is the apparent ortholog of human Siglec-10. 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. Siglec-10 binds sialated proteins and lipids in alpha 2,3 or alpha 2,6 linkage and shows a preference for GT1b gangliosides. This binding can be modulated by cis interactions of Siglec-10 with sialated molecules expressed on the same cell. When tyrosine phosphorylated, the cytoplasmic ITIMs interact with phosphatases SHP-1 and SHP-2 to propagate inhibitory signals. 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.