

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived		
	Human Siglec-15 (Phe20-Thr263) Accession # Q6ZMC9	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Phe20		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	53 kDa		

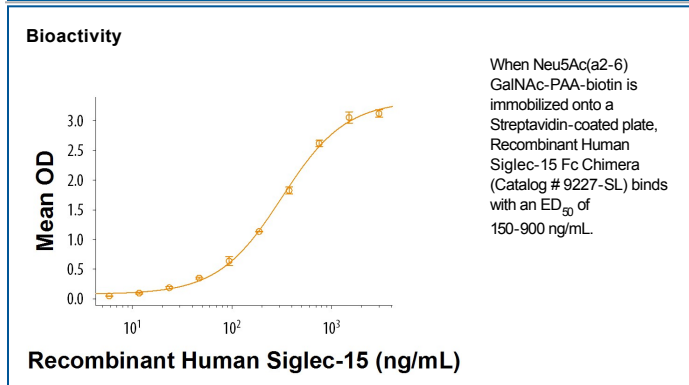
SPECIFICATIONS

SDS-PAGE	53-64 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Neu5Ac(a2-6)GalNAc-PAA-biotin is immobilized onto a Streptavidin-coated plate, Recombinant Human Siglec-15 Fc Chimera binds with an ED ₅₀ of 150-900 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, NaCl, CHAPS and Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 200 µg/mL in water.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Siglec-15 is a transmembrane glycoprotein in the Siglec family of sialic acid-binding immune regulatory molecules (1). Mature human Siglec-15 consists of a 244 amino acid (aa) extracellular domain (ECD) with two Ig-like domains, a 21 aa transmembrane segment, and a 44 aa cytoplasmic domain (2). Within the ECD, human Siglec-15 shares 85% aa sequence identity with mouse and rat Siglec-15. Alternative splicing generates an additional isoform that lacks the signal peptide and first Ig-like domain. Siglec-15 associates with the signaling molecules DAP12 and DAP10 (2-5). It is expressed on osteoclasts, macrophages, and dendritic cells (2-6) and binds to the sialyl-Tn antigen (2, 3, 6). This interaction induces the production of TGF-beta by tumor-associated macrophages (3). Siglec-15 function is important for osteoclast formation and TRANCE/RANK Ligand signaling in osteoclasts (4-6).

References:

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