

SIGLEC8 recombinant protein

Recombinant Human SIGLEC8 Protein (ECD, His Tag), HPLC-verified

CATALOG #
AAA259205

HOST
HEK293 Cells

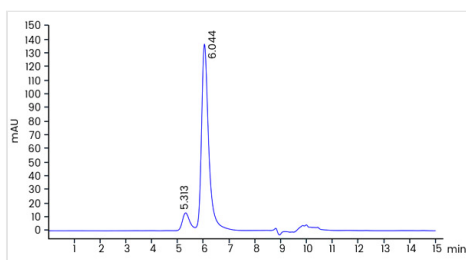
PRODUCT SYNONYMS

SIGLEC8; Recombinant Human SIGLEC8 Protein (ECD; His Tag); HPLC-verified; SAF2 Protein; Human; SIGLEC-8 Protein; SIGLEC8L Protein; SIGLEC8 recombinant protein

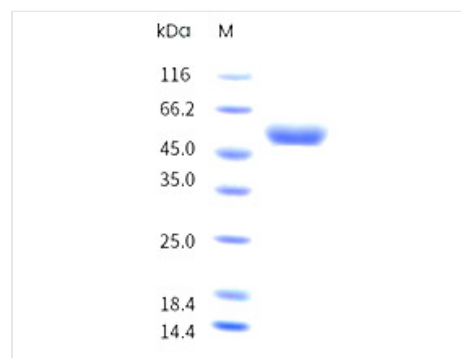
PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>= 95% as determined by SDS-PAGE. = 90% as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile 20mM MES, 150mM NaCl, 10% Glycerol, 10% Trehalose, pH 6.0. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Species	Human
Predicted N Terminal	Met 17
Endotoxin	<1.0 EU per ug protein as determined by the LAL method.
Protein Construction	A DNA sequence encoding the Human SIGLEC8 (NP_055257)(Met1-Ala363) was expressed with a polyhistidine tag at the C-terminus.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for SIGLEC8 recombinant protein	Siglec-8, also known as SAF2, is a single-pass transmembrane CD33 subfamily receptor selectively expressed on human eosinophils and mast cells. Capable of exhibiting cell-type dependent inhibitory activity, siglec-8 has a N-terminal V-set Ig domain containing a sialoglycan binding site that forms strong interactions with the carboxylate group in sialic acid for ligation. In its cytoplasmic domain, siglec-8 has an immunoreceptor tyrosine-based inhibitory motif (ITIM) thought to be critical for downstream signaling and function. Engagement of Siglec-8 on cytokine-primed eosinophils promotes cell death through generation of reactive oxygen species. In contrast, siglec-8 engagement on mast cells inhibits cellular activation and mediator release. Siglec-8 agonist antibodies are currently under investigation for treatment of allergic and inflammatory diseases involving mast cells and eosinophils
References	1. Carroll DJ, et al. Sialic acid-binding immunoglobulin-like lectin 8 (Siglec-8) is an activating receptor mediating beta2-integrin-dependent function in human eosinophils. J Allergy Clin Immunol. 2018. doi: 10.1016/j.jaci.2017.08.013. 2. Cao Y, et al. Interactions between Siglec-8 and endogenous sialylated cis ligands restrain cell death induction in human eosinophils and mast cells. Front Immunol. 2023. doi: 10.3389/fimmu.2023.1283370. 3. Wang Y, et al. Sequence variety in the CC' loop of Siglec-8/9/3 determines the recognitions to sulfated oligosaccharides. Comput Struct Biotechnol J. 2023. doi: 10.1016/j.csbj.2023.08.014. 4. Metz M, et al. Mast cell silencing: A novel therapeutic approach for urticaria and other mast cell-mediated diseases. Allergy. 2023. doi: 10.1111/all.15850.

NCBI AND UNIPROT INFORMATION

NCBI GI #	94538343
NCBI GeneID	27181
NCBI Accession #	NP_055257
NCBI GenBank Nucleotide #	NM_014442
UniProt Accession #	Q9NYZ4; Q7Z728
Molecular Weight	46,434 Da
NCBI Official Full Name	sialic acid-binding Ig-like lectin 8
NCBI Official Synonym Full Names	sialic acid binding Ig-like lectin 8
NCBI Official Symbol	SIGLEC8
NCBI Official Synonym Symbols	SAF2; SIGLEC-8; SIGLEC8L
NCBI Protein Information	sialic acid-binding Ig-like lectin 8; CDw329; SAF-2; sialoadhesin family member 2
UniProt Protein Name	Sialic acid-binding Ig-like lectin 8
UniProt Gene Name	SIGLEC8
UniProt Synonym Gene Names	SAF2; Siglec-8; SAF-2
UniProt Entry Name	SIGL8_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.