Data Sheet (Cat.No.TMPY-02884)

TargetMol

Siglec-5 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	OBBP;SIGLEC5;CD33L2;OB-BP2;OBBP2;CD170;SIGLEC-5;sialic acid binding Ig like lectin 5
Protein Construction:	A DNA sequence encoding the human SIGLEC5 (O15389) (Met1-Thr 434) was expressed, fused with the Fc region of human IgG1 at the C-terminus. Predicted N terminal: Glu 17
Species:	Human
Expression Host:	HEK293 Cells
Accession:	O15389
Molecular Weight:	73.4 kDa (predicted); 74-93 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

SIGLEC5 contains 2 Ig-like C2-type (immunoglobulin-like) domains and 1 Ig-like V-type (immunoglobulin-like) domain. It belongs to the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. SIGLEC5 is expressed by monocytic/myeloid lineage cells. It is found at high levels in peripheral blood leukocytes, spleen, bone marrow and at lower levels in lymph node, lung, appendix, placenta, pancreas and thymus. It is also expressed by monocytes and neutrophils but absent from leukemic cell lines representing early stages of

myelomonocytic differentiation. SIGLEC5 is a putative adhesion molecule that mediates sialic-acid dependent binding to cells. It binds equally to alpha-2,3-linked and alpha-2,6-linked sialic acid. The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface.

Reference

Angata T, et al. (2006) Discovery of Siglec-14, a novel sialic acid receptor undergoing concerted evolution with Siglec-5 in primates. FASEB J. 20(12):1964-73.

Avril T, et al. (2005) Siglec-5 (CD170) can mediate inhibitory signaling in the absence of immunoreceptor tyrosine-based inhibitory motif phosphorylation. J Biol Chem. 280(20):19843-51.

Erickson-Miller CL, et al. (2003) Characterization of Siglec-5 (CD170) expression and functional activity of anti-Siglec-5 antibodies on human phagocytes. Exp Hematol. 31(5):382-8.