

SIGLEC5 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1623b

Specification

SIGLEC5 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

015389

SIGLEC5 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 8778

Other Names

Sialic acid-binding Ig-like lectin 5, Siglec-5, CD33 antigen-like 2, Obesity-binding protein 2, OB-BP2, OB-binding protein 2, CD170, SIGLEC5, CD33L2, OBBP2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1623b was selected from the C-term region of human SIGLEC5 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SIGLEC5 Antibody (C-term) Blocking Peptide - Protein Information

Name SIGLEC5

Synonyms CD33L2, OBBP2

Function

Putative adhesion molecule that mediates sialic-acid dependent binding to cells. 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.

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed by monocytic/myeloid lineage cells. Found at high levels in peripheral blood leukocytes,



spleen, bone marrow and at lower levels in lymph node, lung, appendix, placenta, pancreas and thymus. Expressed by monocytes and neutrophils but absent from leukemic cell lines representing early stages of myelomonocytic differentiation

SIGLEC5 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

SIGLEC5 Antibody (C-term) Blocking Peptide - Images

SIGLEC5 Antibody (C-term) Blocking Peptide - Background

SIGLECs are members of the immunoglobulin superfamily that are expressed on the cell surface. Most SIGLECs have one or more cytoplasmic immune receptor tyrosine-based inhibitory motifs (ITIM). SIGLECs are typically expressed on cells of the innate immune system, with the exception of the B-cell expressed SIGLEC6. Sequence analysis predicted that the 697-amino acid SIGLEC10 protein contains a signal peptide, an N-terminal V-set Ig-like domain and four C2-set Ig-like domains, five potential N-linked glycosylation sites, a transmembrane region, and a 126-residue cytoplasmic tail with 3 putative ITIMs. Northern blot analysis detected a major 3.0-kb SIGLEC10 transcript, with highest levels in spleen, lymph node, blood leukocytes, and appendix. Little or no expression was observed in pancreas, thyroid, and testis. Flow cytometric analysis demonstrated eosinophil-specific expression of SIGLEC10, but at a lower level than that of SIGLEC8. Expression was also detected on monocytes and a CD16-positive/CD56-negative natural killer-like lymphocyte population. After sialidase treatment, which is necessary for unmasking the sialic acid-binding site on SIGLECs interacting with cell surface sialic acids, cells expressing SIGLEC10 bound to red blood cells. Immunoprecipitation analysis indicated expression of a 100- to 120-kD monomeric protein, higher than the predicted molecular mass, suggesting that SIGLEC10 is glycosylated.

SIGLEC5 Antibody (C-term) Blocking Peptide - References

Erickson-Miller, C.L., et al., Exp. Hematol. 31(5):382-388 (2003).Patel, N., et al., J. Biol. Chem. 274(32):22729-22738 (1999).Cornish, A.L., et al., Blood 92(6):2123-2132 (1998).Kim, H.S., Cytogenet. Cell Genet. 84 (1-2), 96 (1999).