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SIGLEC1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1621a

Specification

SIGLEC1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9BZZ2

SIGLEC1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 6614

Other Names
Sialoadhesin, Sialic acid-binding Ig-like lectin 1, Siglec-1, CD169, SIGLEC1, SN

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1621a was selected from the N-term region of human SIGLEC1 . 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.

SIGLEC1 Antibody (N-term) Blocking Peptide - Protein Information

Name SIGLEC1

Synonyms SN

Function
Macrophage-restricted adhesion molecule that mediates sialic- acid dependent binding to lymphocytes, including granulocytes, monocytes, natural killer cells, B-cells and CD8 T-cells. Plays a crucial role in limiting bacterial dissemination by engaging sialylated bacteria to promote effective phagocytosis and antigen presentation for the adaptive immune response (PubMed:12940982, PubMed:33489013). Mediates the uptake of various enveloped viruses via sialic acid recognition and subsequently induces the formation of intracellular compartments filled with virions (VCCs)(PubMed:28129379). In turn, enhances macrophage-to-T-cell transmission of several viruses including HIV-1 or SARS-CoV-2

(PubMed:28129379, PubMed:34782760). Acts as an endocytic receptor mediating clathrin dependent endocytosis. Preferentially binds to alpha-2,3-linked sialic acid (PubMed:12940982). Binds to SPN/CD43 on T-cells (By similarity). May play a role in hemopoiesis. Plays a role in the inhibition of antiviral innate immune by promoting TBK1 degradation via TYROBP and TRIM27-mediated ubiquitination (PubMed:26358190).

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed by macrophages in various tissues. High levels are found in spleen, lymph node, perivascular macrophages in brain and lower levels in bone marrow, liver Kupffer cells and lamina propria of colon and lung. Also expressed by inflammatory macrophages in rheumatoid arthritis

SIGLEC1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SIGLEC1 Antibody (N-term) Blocking Peptide - Images

SIGLEC1 Antibody (N-term) Blocking Peptide - Background

SIGLEC1, encoded by a immunoglobulin superfamily gene, is a lectin-like adhesion molecule which binds glycoconjugate ligands on cell surfaces in a sialic acid-dependent manner. It is a type I transmembrane protein expressed only by a subpopulation of macrophages and is involved in mediating cell-cell interactions. Alternative splicing of the gene produces a variant encoding a protein isoform that is soluble rather than membrane-bound; however, the full-length nature of this variant has not been determined.

SIGLEC1 Antibody (N-term) Blocking Peptide - References

Hartnell, A., et al., Blood 97(1):288-296 (2001).Nath, D., et al., Immunology 98(2):213-219 (1999).Mucklow, S., et al., Genomics 28(2):344-346 (1995).