

SIGLEC1 Rabbit pAb

Catalog # AP99014

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BZZ2
Other Accession	Q9BZZ2
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	182624
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SIGLEC1
Epitope Specificity	51-150/1694
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family. Contains 16 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
SUBUNIT	Isoform 1: Cell membrane; Single-pass type I membrane protein. Isoform 2: Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the immunoglobulin superfamily. The encoded protein is a lectin-like adhesion molecule that 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 produces a transcript variant encoding an isoform that is soluble rather than membrane-bound; however, the full-length nature of this variant has not been determined. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	6614
Other Names	CD169; SIGLEC-1; SN; SN_HUMAN; SIGLEC1; Sialic acid-binding Ig-like lectin 1 (Siglec-1); SN_MOUSE; Sheep erythrocyte receptor (SER); Sa; sialic acid binding Ig like lectin 1; sialoadhesin; sialic acid binding Ig-like lectin 1, sialoadhesin
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.