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SIRPA Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17203b

Specification

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

Primary Accession P78324

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

Gene ID 140885

Other Names
Tyrosine-protein phosphatase non-receptor type substrate 1, SHP substrate 1, SHPS-1, Brain Ig-like molecule with tyrosine-based activation motifs, Bit, CD172 antigen-like family member A, Inhibitory receptor SHPS-1, Macrophage fusion receptor, MyD-1 antigen, Signal-regulatory protein alpha-1, Sirp-alpha-1, Signal-regulatory protein alpha-2, Sirp-alpha-2, Signal-regulatory protein alpha-3, Sirp-alpha-3, p84, CD172a, SIRPA, BIT, MFR, MYD1, PTPNS1, SHPS1, SIRP

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.

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

Name SIRPA

Synonyms BIT, MFR, MYD1, PTPNS1, SHPS1, SIRP

Function
Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Plays a role in antiviral immunity and limits new world arenavirus infection by decreasing virus internalization (By similarity). Receptor for THBS1 (PubMed:24511121). Interaction with THBS1 stimulates phosphorylation of SIRPA (By similarity). In response to THBS1, involved in ROS signaling in non-phagocytic cells, stimulating

NADPH oxidase-derived ROS production (PubMed:24511121).

Cellular Location
Membrane; Single-pass type I membrane protein.

Tissue Location
Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas

SIRPA Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SIRPA Antibody (C-term) Blocking Peptide - Images

SIRPA Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene is a member of thesignal-regulatory-protein (SIRP) family, and also belongs to theimmunoglobulin superfamily. SIRP family members are receptor-typetransmembrane glycoproteins known to be involved in the negativeregulation of receptor tyrosine kinase-coupled signaling processes.This protein can be phosphorylated by tyrosine kinases. Thephospho-tyrosine residues of this PTP have been shown to recruitSH2 domain containing tyrosine phosphatases (PTP), and serve assubstrates of PTPs. This protein was found to participate in signaltransduction mediated by various growth factor receptors. CD47 hasbeen demonstrated to be a ligand for this receptor protein. Thisgene and its product share very high similarity with several othermembers of the SIRP family. These related genes are located inclose proximity to each other on chromosome 20p13. Multiplealternatively spliced transcript variants have been determined forthis gene.

SIRPA Antibody (C-term) Blocking Peptide - References

Shen, X., et al. J. Biol. Chem. 285(38):29416-29424(2010)Kapoor, G.S., et al. Oncogene 29(29):4130-4144(2010)Tsai, R.K., et al. Blood Cells Mol. Dis. 45(1):67-74(2010)Radhakrishnan, Y., et al. J. Biol. Chem. 285(21):15682-15695(2010)de Almeida, A.C., et al. Immunopharmacol Immunotoxicol 31(4):636-640(2009)