

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

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**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:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>). 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:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>).

**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 the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on chromosome 20p13. Multiple alternatively spliced transcript variants have been determined for this 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)