

**Sirp  $\alpha$ 1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50206****Specification**

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**Sirp  $\alpha$ 1 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P78324</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>55,85(actual) KDa</b>
Antigen Region	<b>472-499</b>

**Sirp  $\alpha$ 1 Antibody - 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

**Dilution**

WB~~ 1:1000

IHC~~1:50-1:100

**Format**

Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

**Storage Conditions**

-20°C

**Sirp  $\alpha$ 1 Antibody - 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

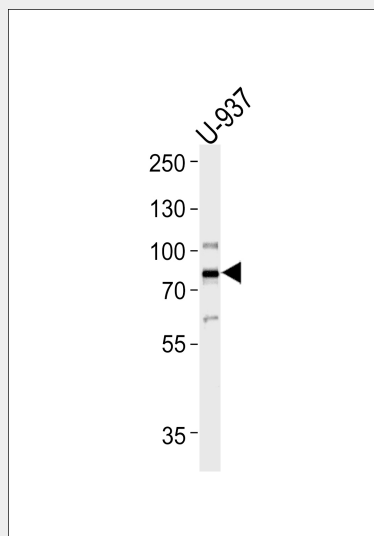
Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas

#### Sirp $\alpha$ 1 Antibody - Protocols

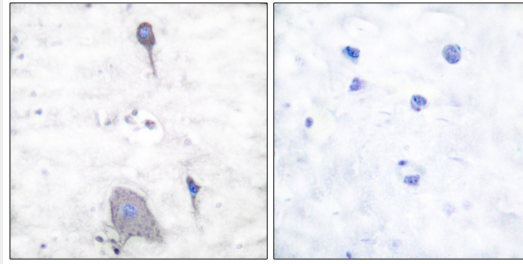
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Sirp $\alpha$ 1 Antibody - Images



Western blot analysis of lysate from U-937 cell line, using Sirp  $\alpha$ 1 Antibody (C0322). C0322 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35  $\mu$ g.



Immunohistochemical analysis of paraffin-embedded human brain tissue using Sirp  $\alpha$ 1 antibody .

### **Sirp $\alpha$ 1 Antibody - Background**

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### **Sirp $\alpha$ 1 Antibody - References**

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Kharitonov A.,et al.Nature 386:181-186(1997).  
Sano S.,et al.Biochem. J. 344:667-675(1999).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Deloukas P.,et al.Nature 414:865-871(2001).