

CD172A / SIRPA Antibody (C-Terminus) Rabbit Polyclonal Antibody Catalog # ALS11442

Specification

CD172A / SIRPA Antibody (C-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, ICC <u>P78324</u> Human, Mouse, Rat Rabbit Polyclonal 55kDa KDa WB~~1:1000 IHC-P~~N/A ICC~~N/A

CD172A / SIRPA Antibody (C-Terminus) - 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

Target/Specificity

peptide corresponding to amino acids near the carboxy terminus of human SIRPa1? The sequences of the immunogenic peptide differ from those of mouse, rat and bovine by one amino acid

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions CD172A / SIRPA Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CD172A / SIRPA Antibody (C-Terminus) - 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

CD172A / SIRPA Antibody (C-Terminus) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD172A / SIRPA Antibody (C-Terminus) - Images



Immunocytochemistry of SIRP alpha in THP-1 cells with SIRP alpha antibody at 1 ug/ml.





Anti-SIRPA antibody IHC of human placenta. CD172A / SIRPA Antibody (C-Terminus) - Background

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.

CD172A / SIRPA Antibody (C-Terminus) - References

Yamao T.,et al.Biochem. Biophys. Res. Commun. 231:61-67(1997). Kharitonenkov 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).