

## ARG44739 anti-CD172a / SIRP alpha antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody recognizes CD172a / SIRP alpha
Tested Reactivity	Hu
Tested Application	IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	CD172a / SIRP alpha
Species	Human
Conjugation	Un-conjugated
Alternate Names	CD172A; p84; SHPS1; SHPS-1; CD172 antigen-like family member A; Sirp-alpha-3; Sirp-alpha-1; BIT; MYD-1; MFR; Bit; PTPNS1; CD antigen CD172a; Inhibitory receptor SHPS-1; SIRP; MyD-1 antigen; Sirp-alpha-2; Tyrosine-protein phosphatase non-receptor type substrate 1; Signal-regulatory protein alpha-1; Signal-regulatory protein alpha-2; Signal-regulatory protein alpha-3; Macrophage fusion receptor; Brain Ig-like molecule with tyrosine-based activation motifs; P84; SHP substrate 1

### Application Instructions

Application table	Application	Dilution
	IHC-P	5-10 µg/mL
	IP	10 µg/mL
	WB	1 µg/mL

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Protein A purification
Buffer	PBS with 0.09% sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

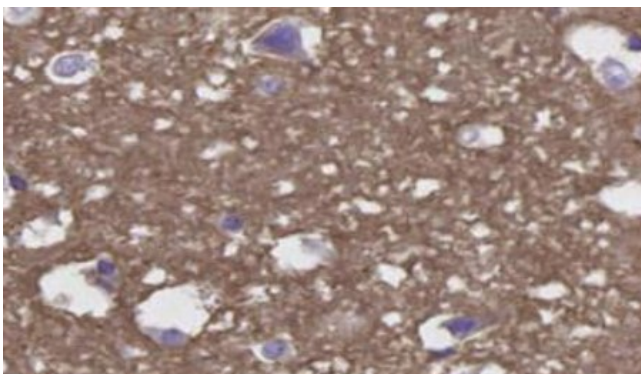
## Bioinformation

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Gene Symbol	SIRPA
Gene Full Name	signal-regulatory protein alpha
Background	<p>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. [provided by RefSeq, Jul 2008]</p>
Function	<p>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. [UniProt]</p>
Calculated Mw	55 kDa
PTM	<p>N-glycosylated.</p> <p>Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11. [UniProt]</p>
Cellular Localization	Membrane; Single-pass type I membrane protein. [UniProt]

## Images

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ARG44739 anti-CD172a / SIRP alpha antibody IHC-P image

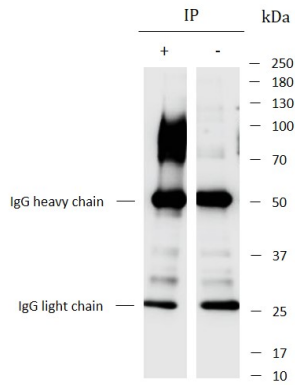
Immunohistochemistry: Human brain stained with ARG44739 anti-CD172a / SIRP alpha antibody at 5 µg/mL dilution.

ARG44739 anti-CD172a / SIRP alpha antibody WB image



Western blot: THP1 stained with ARG44739 anti-CD172a / SIRP alpha antibody at 1  $\mu$ g/mL dilution.

ARG44739 anti-CD172a / SIRP alpha antibody IP image



Immunoprecipitation: THP1 lysate immunoprecipitated with 2.5  $\mu$ g of ARG44739 anti-CD172a / SIRP alpha antibody.