



SIRP- α 1 Rabbit mAb

Catalog No	YP-rAb-17110
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	SIRPA
Protein Name	Tyrosine-protein phosphatase non-receptor type substrate 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	$\geq 90\%$
Storage Stability	-15°C to -25°C /1 year(Do not lower than -25°C)
Synonyms	SIRPA ; BIT ; MFR ; MYD1 ; PTPNS1 ; SHPS1 ; SIRP ; 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 ; Inhibito
Observed Band	85kD
Calculated Molecular Weight	55kD
Cell Pathway	Membrane; Single-pass type I membrane protein.
Tissue Specificity	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.
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.,PTM:N-glycosylated.,PTM:Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11.,similarity:Contains 1 Ig-like V-type (immunoglobulin-like) domain.,similarity:Contains 2 Ig-like C1-type (immunoglobulin-like) domains.,subunit:Binds PTPN11 when tyrosine-phosphorylated, except in macrophages, where it primarily binds PTPN6. Binds GRB2 in vitro. Binds FGR (By similarity). Binds JAK2 irrespective of its phosphorylation status and forms a stable complex. Binds SCAP1 and/or SCAP2. The resulting complex recruits FYB. Binds PTK2B.,tissue specificity: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.,

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, 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 alternati

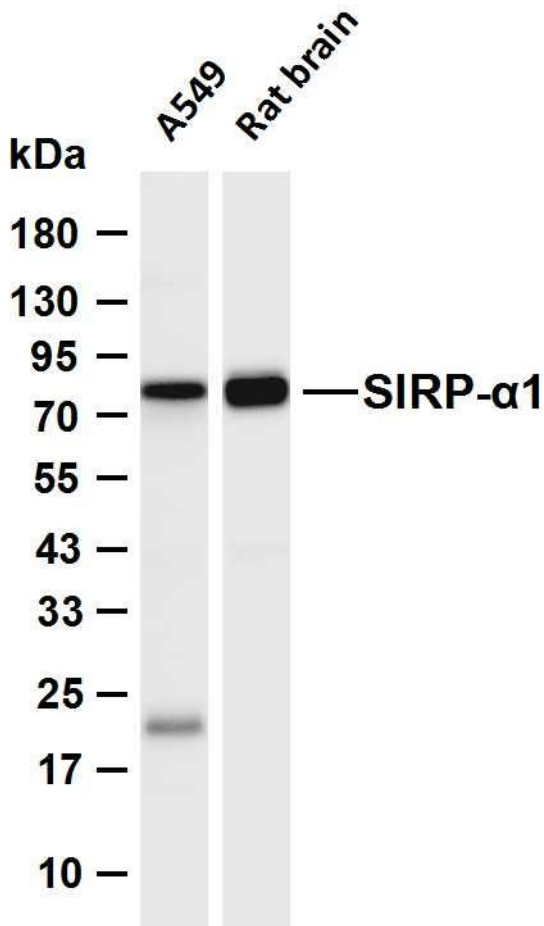
matters needing attention

Avoid repeated freezing and thawing!

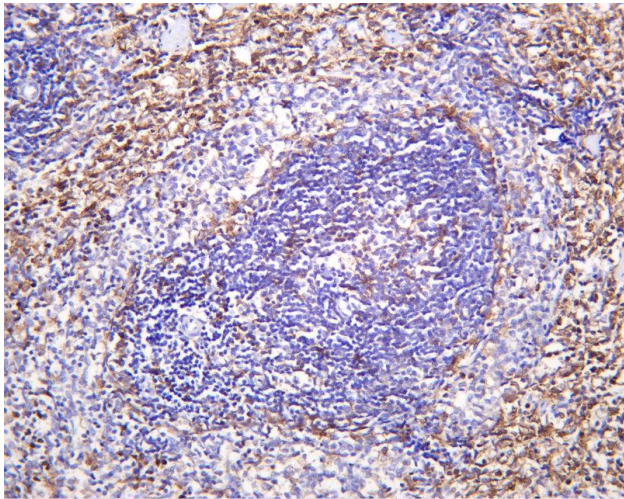
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SIRP- α 1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: Rat brain Predicted band size: 55kDa Observed band size: 85kDa



Rat spleen was stained with anti-SIRP- α 1 Rabbit antibody

