

## ARG54417 anti-CD172a / SIRP alpha antibody

Package: 50 μg Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes CD172a / SIRP alpha
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Bov
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD172a / SIRP alpha
Species	Human
Immunogen	Peptide corresponding to the C-terminus of human SIRPα.
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**

Cross Reactivity Note	, 0	This antibody recognizes full-length human SIRP $\alpha$ (75-110 kD). The sequence of this peptide differs from those of mouse, rat, and bovine SIRP $\alpha$ by one amino acid, so this antibody may be used to detect SIRP $\alpha$ of these species.	
Application table	Application	Dilution	
	WB	1:1,000-1:2,000	
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.		
Positive Control	Whole cell lysate from TI	HP-1 cells.	

# Properties

Form	Liquid
Purification	Purified by immunoaffinity chroma-tography.
Buffer	PBS (pH 7.4) and 0.02% Sodium azide
Preservative	0.02% 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

Database links	GenelD: 140885 Human
	Swiss-port # P78324 Human
Gene Symbol	SIRPA
Gene Full Name	signal-regulatory protein alpha
Background	Protein tyrosine phosphatases (PTPases), such as SHP-1 and SHP-2, are critical regulators in the intracellular signaling pathways that result in cell responses such as mitosis, differentiation, migration, survival, transformation or death. SHP-2 is a signal transducer for several receptor tyrosine kinases and cytokine receptors. A novel SHP-2 associated glycoprotein was recently cloned from human, rat, mouse, and cattle by several laboratories and was designated SIRP $\alpha$ , SHPS-1, and MyD-1. SIRP $\alpha$ /SHPS-1 is a new gene family containing at least fifteen members. SIRP $\alpha$ /SHPS-1 is a substrate of manyactivated tyrosine kinases such as insulin receptor, EGFR, PDGFR, and src, and is a specific docking protein for SHP-2. SIRP $\alpha$ /SHPS-1 has regulatory effects on cellular responses induced by serum,growth factors, insulin, oncogenes, and cell adhesion and plays a general role in different physiological and pathological processes.
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. [UniProt]
Highlight	Related Antibody Duos and Panels: <u>ARG30142 Cardiomyocyte Cell Surface Marker Antibody Panel (Cx43, Desmin, SIRP)</u> Related products: <u>CD172a antibodies; CD172a Duos / Panels; Anti-Rabbit IgG secondary antibodies;</u>
Research Area	Cell Biology and Cellular Response antibody; Neuroscience antibody; Cardiomyocyte Cell Surface Marker antibody
Calculated Mw	55 kDa
PTM	N-glycosylated.
	Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11. [UniProt]
Cellular Localization	Membrane; Single-pass type I membrane protein [UniProt]