10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CD172a/b Antibody

Catalog # AP53959

Product Information

Application	WB
Primary Accession	P78324
Other Accession	Q5TFQ8
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54967

Additional Information

Gene ID	140885
Other Names	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; 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; SIRPB1; Signal-regulatory protein beta-1 isoform 3; SIRP-beta-1 isoform 3
Target/Specificity	Recognizes endogenous levels of CD172a/b protein.
Dilution	WB~~1/500 - 1/1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

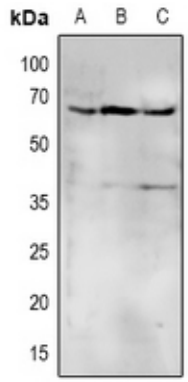
Name	SIRPA
Synonyms	BIT, MFR, MYD1, PTPNS1, SHPS1, SIRP
Function	Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite 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

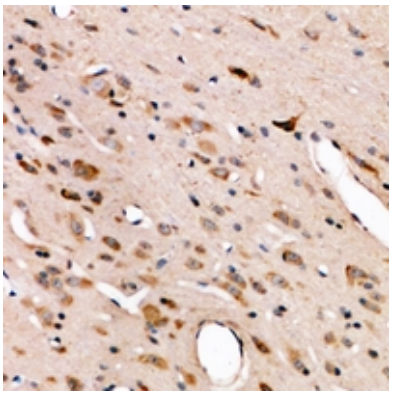
Background

Rabbit polyclonal antibody to CD172a/b

Images



Western blot analysis of CD172a/b expression in Hela (A), HepG2 (B), SGC7901 (C) whole cell lysates.



Immunohistochemical analysis of CD172a/b staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.