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Anti-CD172a Antibody

Rabbit polyclonal antibody to CD172a
Catalog # AP59897

Product Information

Application	WB, IP, IF/IC
Primary Accession	P78324
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54967

Additional Information

Gene ID	140885
Other Names	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
Target/Specificity	Recognizes endogenous levels of CD172a protein.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IP~~N/A IF/IC~~N/A
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).

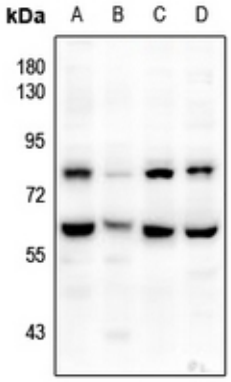
Cellular Location Membrane; Single-pass type I membrane protein.

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

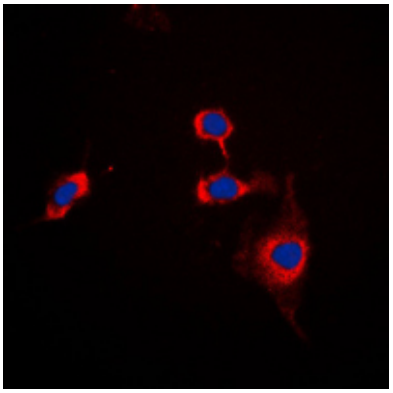
Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD172a. The exact sequence is proprietary.

Images



Western blot analysis of CD172a expression in Hela (A), A549 (B), C6 (C), CT26 (D) whole cell lysates.



Immunofluorescent analysis of CD172a staining in THP1 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).