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Anti-CD172a-Biotin-labled

Catalog # AP101009

Product Information

Application	FC, IF/IC
Primary Accession	P97797
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	56414

Additional Information

Gene ID	19261
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 mouse CD172a
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Rat IgG1 kappa. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Sirpa
Synonyms	Bit, Myd1, Ptpns1, Shps1, Sirp
Function	Immunoglobulin-like cell surface receptor for CD47 (PubMed: 18045614). Acts as a 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. 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 (By similarity). Plays a role in antiviral immunity and limits new world arenavirus

	infection by decreasing virus internalization (PubMed:30726215). Receptor for THBS1 (By similarity). 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 (By similarity).
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Highly expressed in cerebral cortex, brain, spinal cord, cerebellum and spleen, and at much lower levels in kidney, thymus, heart, lung and liver. Within the cerebellum, highly expressed throughout the molecular layer, and in synaptic glomeruli in the granule cell layer. Detected in neurons of the hippocampus and dentate gyrus, and in olfactory bulb. Not detected in Purkinje cells. Highly expressed in the plexiform layers, optic fiber layer and the outer segments of the photoreceptor layer in the retina. Highly expressed in macrophages. Isoform 3 is detected at very low levels in all tissues tested.

Background

Biotin-labled rat monoclonal antibody to CD172a

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