

**Anti-CD172a/b Antibody**  
**Catalog # AP53959****Specification****Anti-CD172a/b Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P78324</a>
Other Accession	<a href="#">Q5TFQ8</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54967

**Anti-CD172a/b Antibody - 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**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD172a/b. The exact sequence is proprietary.

**Dilution**

WB~~1/500 - 1/1000

IHC~~1:100~500

**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

**Anti-CD172a/b Antibody - 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:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>). 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:<a href="http://www.uniprot.org/citations/24511121" target="\_blank">24511121</a>).

#### Cellular Location

Membrane; Single-pass type I membrane protein.

#### Tissue Location

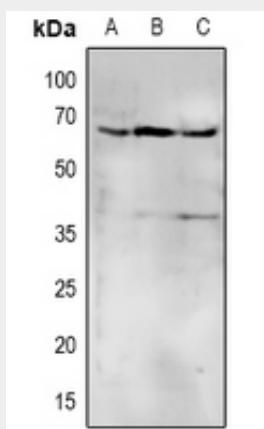
Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas

#### Anti-CD172a/b Antibody - Protocols

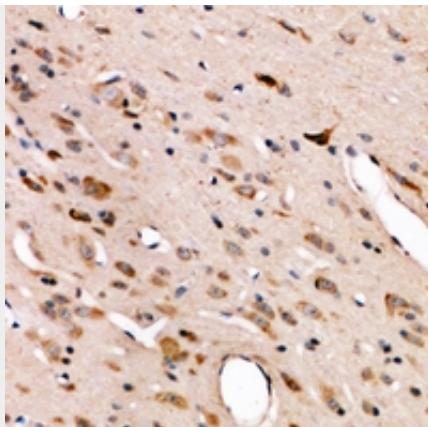
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-CD172a/b Antibody - 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.

**Anti-CD172a/b Antibody - Background**

Rabbit polyclonal antibody to CD172a/b