

**Anti-CD172a Antibody**  
Rabbit polyclonal antibody to CD172a  
Catalog # AP59897

## Specification

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### Anti-CD172a Antibody - Product Information

Application	WB, IF
Primary Accession	<a href="#">P78324</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54967

### Anti-CD172a Antibody - 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)  
IF~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500), IP (1/10 - 1/100)

#### 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 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

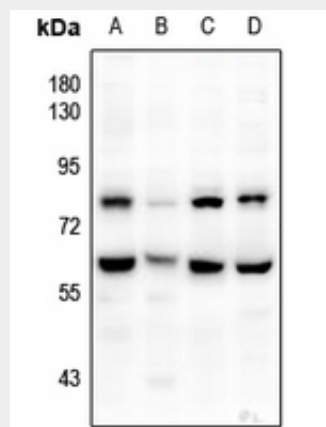
Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas

#### Anti-CD172a Antibody - Protocols

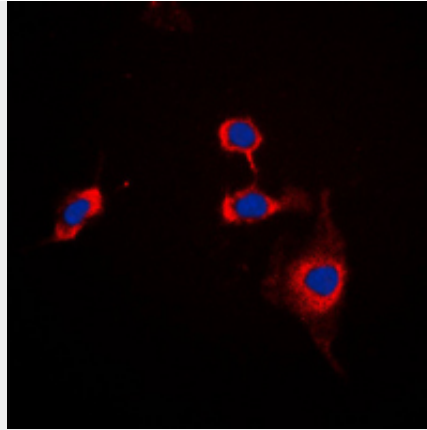
Provided below are standard protocols that you may find useful for product applications.

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

#### Anti-CD172a Antibody - 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).

#### **Anti-CD172a Antibody - Background**

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