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# CD172A

Purified Mouse Monoclonal Antibody
Catalog # AO2705a

## Product Information

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|---|---|
| **Application** | WB, IHC, ICC, E |
| **Primary Accession** | P78324 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 2H7E2 |
| **Isotype** | Mouse IgG1 |
| **Calculated MW** | 54967 |
| **Immunogen** | Purified recombinant fragment of human CD172A (AA: extra 235-373) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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|---|---|
| **Gene ID** | 140885 |
| **Other Names** | BIT; MFR; P84; SIRP; MYD-1; SHPS1; SIRPA; PTPNS1 |
| **Dilution** | WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000 |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | CD172A is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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|---|---|
| **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

## References

1.J Biol Chem. 2015 Dec 25;290(52):31113-25.2.J Innate Immun. 2014;6(4):553-60.

## Images

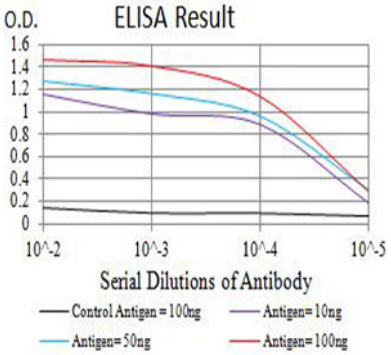



Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

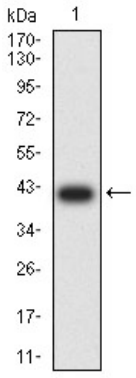
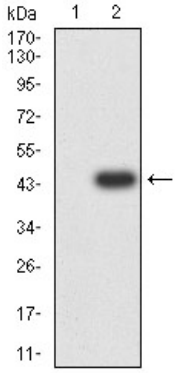



Figure 2:Western blot analysis using CD172A mAb against human CD172A (AA: extra 235-373) recombinant protein. (Expected MW is 41.5 kDa)

Figure 3:Western blot analysis using CD172A mAb against HEK293 (1) and CD172A (AA: extra 235-373)-hIgGFc transfected HEK293 (2) cell lysate.



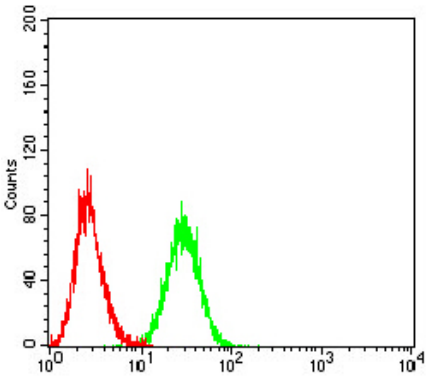




Figure 4:Flow cytometric analysis of Ramos cells using CD172A mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.