

## Monoclonal Antibody to CD172a / SIRPA - PE

<b>Alternate names:</b>	BIT, Brain Ig-like molecule with tyrosine-based activation motifs, CD172 antigen-like family member A, Inhibitory receptor SHPS-1, MFR, MYD1, Macrophage fusion receptor, MyD-1 antigen, PTPNS1, SHP substrate 1, SHPS-1, SHPS1, Signal-regulatory protein alpha-1, Sirp-alpha-2, Sirp-alpha-3, Tyrosine-protein phosphatase non-receptor type substrate 1, p84
<b>Catalog No.:</b>	AM05588RP-N
<b>Quantity:</b>	100 Tests
<b>Concentration:</b>	0,1 mg/ml
<b>Background:</b>	CD172a is a receptor-type transmembrane glycoprotein expressed on cells of myeloid origin, including granulocytes, dendritic cells (DCs), macrophages, mast cells and haematopoietic stem cells. CD172a acts as a substrate for several activated tyrosine kinases, including EGFR, PDGFR, src and insulin receptor and is involved in the negative regulation of receptor tyrosine kinase-coupled signaling pathways. Ligand binding of CD172a to integrin-associated protein CD47, results in tyrosine kinase phosphorylation of immunoreceptor tyrosine-based inhibitory motifs (ITIMs) within the cytoplasmic region of CD172a, mediating the recruitment and activation of the tyrosine phosphatases SHP-1 and SHP-2. These then act as regulators of cellular function, through dephosphorylation of specific substrates. Ligation of CD172a with CD47 has been demonstrated in several regulatory processes, including the inhibition of host cell phagocytosis by macrophages and the bi-directional activation of T cells and DCs.
<b>Uniprot ID:</b>	<a href="#">P78324</a>
<b>NCBI:</b>	<a href="#">NP_001035111.1</a>
<b>GeneID:</b>	<a href="#">140885</a>
<b>Host / Isotype:</b>	Mouse / IgG2a
<b>Clone:</b>	15-414
<b>Immunogen:</b>	Monocyte-derived dendritic cells.
<b>Format:</b>	<b>State:</b> Lyophilised purified IgG <b>Purification:</b> Affinity chromatography on Protein G <b>Buffer System:</b> Phosphate buffered saline pH7.4 containing 0.09% Sodium Azide (NaN <sub>3</sub> ) and 1% Bovine Serum Albumin <b>Label:</b> PE – R. Phycoerythrin (RPE) <b>Reconstitution:</b> Reconstitute with 1.0ml distilled water.
<b>Applications:</b>	Flow Cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

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Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

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- Specificity:** This antibody is specific for CD172a, also known as signal-regulatory protein alpha.  
**Species:** Human.  
Other species not tested.
- Storage:** Prior to and following reconstitution store the antibody at 2-8°C.  
DO NOT FREEZE!  
This product is photosensitive and should be protected from light.  
Shelf life: one year from despatch.
- Caution:** (A full Health and Safety assessment is available upon request) This product contains Sodium Azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
- General Readings:** 1. Fujioka Y, Matozaki T, Noguchi T, Iwamatsu A, Yamao T, Takahashi N, et al. A novel membrane glycoprotein, SHPS-1, that binds the SH2-domain-containing protein tyrosine phosphatase SHP-2 in response to mitogens and cell adhesion. Mol Cell Biol. 1996 Dec;16(12):6887-99. PubMed PMID: 8943344.  
2. van Beek, E.M. et al. (2005) Signal regulatory proteins in the immune system. J. Immunol. 175: 7781 - 7787.

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