OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM05588PU-N

SIRP alpha (SIRPA) Mouse Monoclonal Antibody [Clone ID: 15-414]

Product data:

Product Type:	Primary Antibodies
Clone Name:	15-414
Applications:	FC, IHC
Recommended Dilution:	**Flow Cytometry:** Use 10 µl of 1/25-1/100 diluted antibody to label 1x10e6 cells in 100 µl. **Immunohistochemistry on Frozen Sections:** 1/100. *Recommended Positive Control:* Human tonsil tissue.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Monocyte-derived dendritic cells. Spleen cells from immunised Balb/c mice were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity:	This antibody is specific for CD172a, also known as signal-regulatory protein alpha.
Formulation:	PBS, pH7.4 containing 0.09% Sodium Azide as preservative State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	signal regulatory protein alpha
Database Link:	Entrez Gene 140885 Human P78324

View online »

Background: 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.

Synonyms: SHP substrate 1, SHPS-1, Sirp-alpha-2, Sirp-alpha-3, MyD-1 antigen, p84, BIT, MFR, MYD1, PTPNS1, SHPS1