

Mouse anti-Human CD172a Antibody | anti-CD172a antibody

Anti-Hu CD172a PerCP-Cy5.5

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129369	Mouse	Human	Flow Cytometry, Functional Assay

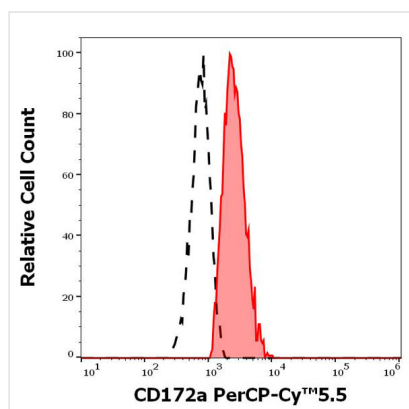
PRODUCT SYNONYMS

CD172a; Anti-Hu CD172a PerCP-Cy5.5; signal regulatory protein alpha; PTPNS1; BIT; MFR; SIRPA; SHPS1; anti-CD172a antibody

PRODUCT SPECIFICATIONS

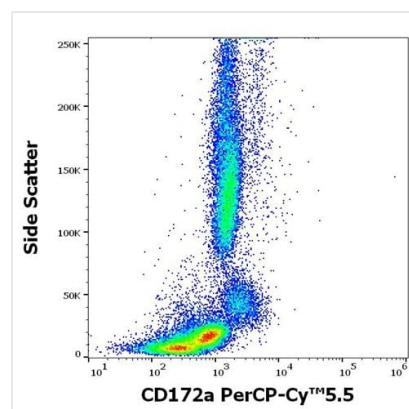
Host	Mouse
Reactivity	Human
Isotype	Mouse IgG2a
Clone Number	15-414
Specificity	The mouse monoclonal antibody 15-414 recognizes an extracellular epitope of CD172a (SIRP alpha), an approximately 90 kDa transmembrane glycoprotein expressed on cells of myeloid origin and neurons.
Purity/Purification	Purified antibody is conjugated with activated tandem dye of activated Peridinin-Chlorophyll Protein-Cyanine 5.5 (PerCP-Cy5.5) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Applicable Applications for anti-CD172a antibody	FCM/FACS (Flow Cytometry)
Immunogen	Kg-1a cell line
Conjugation	PerCP-Cy5.5
Preparation and Storage	Store at 2-8 degree C. Protect from prolonged exposure to light. Do not freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD172a (15-414) PerCP-Cy5.5 antibody (4ul reagent/100ul of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD172a (15-414) PerCP-Cy5.5 antibody (4ul reagent/100ul of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD172a antibody	CD172a, the signal-regulatory protein alpha (SIRP alpha), also known as SH2 domain-containing phosphatase substrate-1 (SHPS1), is a 75-110 kDa transmembrane glycoprotein expressed mainly on granulocytes, monocytes, macrophages, dendritic cells and neurons. Its extracellular ligand is CD47. CD172a serves as a substrate of activated receptor tyrosine kinases and upon phosphorylation it recruits SH2 domain-containing tyrosine phosphatases, thereby regulating signal transduction processes related to cell activation, transmigration and phagocytosis. CD172a is a specific marker of cardiomyocytes derived from human pluripotent stem cells and serves as a negative regulator of signaling and growth in myeloid progenitor cells.
References	*Liu Y, Buhning HJ, Zen K, Burst SL, Schnell FJ, Williams IR, Parkos CA: Signal regulatory protein (SIRPalph), a cellular ligand for CD47, regulates neutrophil transmigration. J Biol Chem. 2002 Mar 22;277(12):10028-36., URL: https://pubmed.ncbi.nlm.nih.gov/11792697/,*Seiffert M, Brossart P, Cant C, Cella M, Colonna M, Brugger W, Kanz L, Ullrich A, Buhning HJ: Signal-regulatory protein alpha (SIRPalph) but not SIRPbeta is involved in T-cell activation, binds to CD47 with high affinity, and is expressed on immature CD34(+)CD38(-) hematopoietic cells. Blood. 2001 May 1;97(9):2741-9., URL: https://pubmed.ncbi.nlm.nih.gov/11313266/, *Baba T, Badr Mel S, Tomaru U, Ishizu A, Mukaida N: Novel process of intrathymic tumor-immune tolerance through CCR2-mediated recruitment of Sirpalph+ dendritic cells: a murine model. PLoS One. 2012;7(7):e41154. doi: 10.1371/journal.pone.0041154., URL: https://www.ncbi.nlm.nih.gov/pubmed/22815949,*Hansen IS, Krabbendam L, Bernink JH, Loayza-Puch F, Hoepel W, van Burgsteden JA, Kuijper EC, Buskens CJ, Bemelman WA, Zaat SAJ, Agami R, Vidarsson G, van den Brink GR, de Jong EC, Wildenberg ME, Baeten DLP, Everts B, den Dunnen J: FcalphaRI co-stimulation converts human intestinal CD103+ dendritic cells into pro-inflammatory cells through glycolytic reprogramming. Nat Commun. 2018 Feb 28;9(1):863., URL: https://pubmed.ncbi.nlm.nih.gov/29491406/,

NCBI AND UNIPROT INFORMATION

NCBI GI #	91105764
NCBI GeneID	140885
NCBI Accession #	NP_001035111.1
NCBI GenBank Nucleotide #	NM_001040022.1
UniProt Accession #	P78324 ; O00683 ; O43799 ; Q8N517 ; Q8TAL8 ; Q9H0Z2 ; Q9UDX2 ; Q9UIJ6 ; Q9Y4U9 ; A2A2E1 ; A8K411 ; B2R6C3
Molecular Weight	54,967 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type substrate 1
NCBI Official Synonym Full Names	signal-regulatory protein alpha
NCBI Official Symbol	SIRPA
NCBI Official Synonym Symbols	BIT; MFR; P84; SIRP; MYD-1; SHPS1; CD172A; PTPNS1
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type substrate 1; myd-1 antigen; inhibitory receptor SHPS-1; macrophage fusion receptor; CD172 antigen-like family member A; tyrosine phosphatase SHP substrate 1; brain-immunoglobulin-like molecule with tyrosine-b
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type substrate 1
UniProt Gene Name	SIRPA
UniProt Synonym Gene Names	BIT; MFR; MYD1; PTPNS1; SHPS1; SIRP; SHP substrate 1; SHPS-1; Bit; Sirp-alpha-1; Sirp-alpha-2
UniProt Entry Name	SHPS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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