

anti-Human CD172ab Antibody | anti-CD172ab antibody

Anti-Hu CD172ab APC

CATALOG # AAA129291	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay
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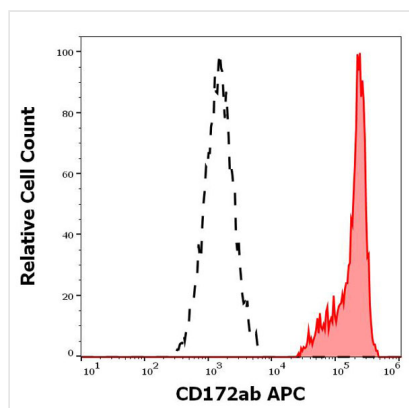
PRODUCT SYNONYMS

CD172ab; Anti-Hu CD172ab APC; PTPNS1; BIT; MFR; SIRPA; SHPS1; SIRPB1;; anti-CD172ab antibody

PRODUCT SPECIFICATIONS

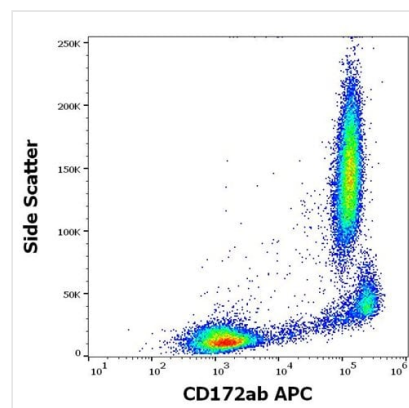
Reactivity	Human
Isotype	Mouse IgG1
Clone Number	SE5A5
Specificity	The mouse monoclonal antibody SE5A5 recognizes a common extracellular epitope on human CD172a and CD172b antigens (approx. 90 kDa and approx. 50 kDa, respectively), although its reactivity with CD172a is higher.
Form/Format	APC Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography. Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 m
Applicable Applications for anti-CD172ab antibody	FCM/FACS (Flow Cytometry)
Immunogen	NIH-3T3/human CD172a cell line
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 CD172ab (SE5A5) APC antibody (10 ?l reagent / 100 ?l of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD172ab (SE5A5) APC antibody (10 ?l reagent / 100 ?l of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD172ab 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. Extracellular part of CD172b is 90% identical to that of CD172a, but unlike CD172, it has dramatically reduced intracellular domain.
References	*Suparak S, Muangsombut V, Riyapa D, Stevens JM, Stevens MP, Lertmemongkolchai G, Korbsrisate S: Burkholderia pseudomallei-induced cell fusion in U937 macrophages can be inhibited by monoclonal antibodies against host cell surface molecules. Microbes Infect. 2011 Nov;13(12-13):1006-11., URL: http://www.ncbi.nlm.nih.gov/pubmed/21784167,*Orazizadeh M, Salter DM: The expression of signal regulatory protein-alpha in normal and osteoarthritic human articular cartilage and its involvement in chondrocyte mechano-transduction response. Iran Biomed J. 2007 Apr;11(2):119-24., URL: http://www.ncbi.nlm.nih.gov/pubmed/18051954,*Scherthaner GH, Hauswirth AW, Baghestanian M, Agis H, Ghannadan M, Worda C, Krauth MT, Printz D, Fritsch G, Sperr WR, Valent P: Detection of differentiation- and activation-linked cell surface antigens on cultured mast cell progenitors. Allergy. 2005 Oct;60(10):1248-55., URL: http://www.ncbi.nlm.nih.gov/pubmed/16134990,*Kim EJ, Suk K, Lee WH: SHPS-1 and a synthetic peptide representing its ITIM inhibit the MyD88, but not TRIF, pathway of TLR signaling through activation of SHP and PI3K in THP-1 cells. Inflamm Res. 2013 Apr;62(4):377-86., URL: http://www.ncbi.nlm.nih.gov/pubmed/23314616,*Brooke G, Holbrook JD, Brown MH, Barclay AN: Human lymphocytes interact directly with CD47 through a novel member of the signal regulatory protein (SIRP) family. J Immunol. 2004 Aug 15;173(4):2562-70., URL: http://www.ncbi.nlm.nih.gov/pubmed/?term=brooke+g+holbrook+jd,*Hatherley D, Harlos K, Dunlop DC, Stuart DI, Barclay AN: The structure of the macrophage signal regulatory protein alpha (SIRPalpha) inhibitory receptor reveals a binding face reminiscent of that used by T cell receptors. J Biol Chem. 2007 May 11;282(19):14567-75., URL: http://www.ncbi.nlm.nih.gov/pubmed/17369261,*Ha B, Lv Z, Bian Z, Zhang X, Mishra A, Liu Y: 'Clustering' SIRP? into the plasma membrane lipid microdomains is required for activated monocytes and macrophages to mediate effective cell surface interactions with CD47. PLoS One. 2013 Oct 15;8(10):e77615., URL: http://www.ncbi.nlm.nih.gov/pubmed/24143245,*Florian S, Ghannadan M, Mayerhofer M, Aichberger KJ, Hauswirth AW, Scherthaner GH, Printz D, Fritsch G, Böhm A, Sonneck K, Krauth MT, Müller MR, Sillaber C, Sperr WR, Bühring HJ, Valent P: Evaluation of normal and neoplastic human mast cells for expression of CD172a (SIRPalpha), CD47, and SHP-1. J Leukoc Biol. 2005 Jun;77(6):984-92. Epub 2005 Mar 22., URL: http://www.ncbi.nlm.nih.gov/pubmed/15784688,

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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Online datasheet: <https://www.aaabiotech.com/human-antibody/cd172ab/129291>