

anti-Human CD2 Antibody | anti-CD2 antibody

Anti-Hu CD2 APC

CATALOG # AAA129283	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay
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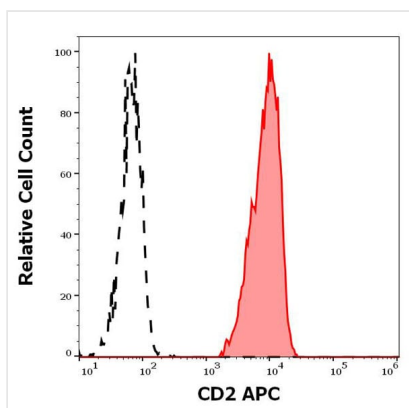
PRODUCT SYNONYMS

CD2; Anti-Hu CD2 APC; CD2 molecule; T11; LFA-2; SRBC; anti-CD2 antibody

PRODUCT SPECIFICATIONS

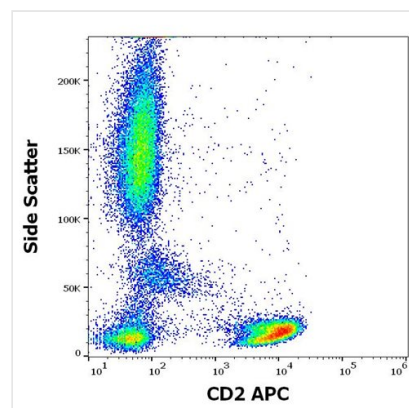
Reactivity	Human
Isotype	Mouse IgG1 kappa
Clone Number	TS1/8
Specificity	The mouse monoclonal antibody TS1/8 recognizes an extracellular epitope of CD2, a 50 kDa glycoprotein present on the human peripheral blood T lymphocytes and NK cells; also expressed by all thymocytes.
Form/Format	APC Purified antibody 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-CD2 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Cytotoxic T lymphocytes
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 CD2 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD2 (TS1/8) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD2 (TS1/8) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD2 antibody	CD2 belongs to T lymphocyte glycoproteins of immunoglobulin superfamily. Its interaction with CD58 stabilizes adhesion between T cells and antigen presenting or target cells. Relatively low affinity of CD2 to CD58 (as measured in solution) is compensated within the two-dimensional cell-cell interface to provide tight adhesion. Moreover, T cell activation induces increased CD2 expression and its lateral mobility, making easier contact between CD2 and CD58. Subsequently, T cell activation causes fixation of CD58-CD2 at sites of cell-cell contact, thereby strengthening intercellular adhesion. CD2 deficiency reduces intestinal inflammation and helps to control infection.
References	*Sanchez-Madrid F, Krensky AM, Ware CF, Robbins E, Strominger JL, Burakoff SJ, Springer TA: Three distinct antigens associated with human T-lymphocyte-mediated cytotoxicity: LFA-1, LFA-2, and LFA-3. Proc Natl Acad Sci U S A. 1982 Dec;79(23):7489-93., URL: http://www.ncbi.nlm.nih.gov/pubmed/6984191 Vollger,*Zhang B, Dai M, Li QJ, Zhuang Y: Tracking proliferative history in lymphocyte development with cre-mediated sister chromatid recombination. PLoS Genet. 2013 Oct;9(10):e1003887., URL: http://www.ncbi.nlm.nih.gov/pubmed/24204301, *Pawlowski NN, Struck D, Grollich K, Kuhl AA, Zeitz M, Liesenfeld O, Hoffmann JC: CD2 deficiency partially prevents small bowel inflammation and improves parasite control in murine Toxoplasma gondii infection. World J Gastroenterol. 2007 Aug 21;13(31):4207-13., URL: https://pubmed.ncbi.nlm.nih.gov/17696249/,*Zhu DM, Dustin ML, Cairo CW, Thatte HS, Golan DE: Mechanisms of cellular avidity regulation in CD2-CD58-mediated T cell adhesion. ACS Chem Biol. 2006 Nov 21;1(10):649-58., URL: https://pubmed.ncbi.nlm.nih.gov/17168569/,*Dustin ML: Adhesive bond dynamics in contacts between T lymphocytes and glass-supported planar bilayers reconstituted with the immunoglobulin-related adhesion molecule CD58. J Biol Chem. 1997 Jun 20;272(25):15782-8., URL: https://pubmed.ncbi.nlm.nih.gov/9188475/,*Pawlowski NN, Struck D, Grollich K, Kuhl AA, Zeitz M, Liesenfeld O, Hoffmann JC: CD2 deficiency partially prevents small bowel inflammation and improves parasite control in murine Toxoplasma gondii infection. World J Gastroenterol. 2007 Aug 21;13(31):4207-13., URL: https://pubmed.ncbi.nlm.nih.gov/17696249/,

NCBI AND UNIPROT INFORMATION

NCBI GI #	156071472
NCBI GeneID	914
NCBI Accession #	NP_001758.2
NCBI GenBank Nucleotide #	NM_001767.3
UniProt Accession #	P06729; Q96TE5
Molecular Weight	39,448 Da
NCBI Official Full Name	T-cell surface antigen CD2
NCBI Official Synonym Full Names	CD2 molecule
NCBI Official Symbol	CD2
NCBI Official Synonym Symbols	T11; SRBC; LFA-2
NCBI Protein Information	T-cell surface antigen CD2; CD2 antigen (p50), sheep red blood cell receptor; LFA-3 receptor; T-cell surface antigen T11/Leu-5; erythrocyte receptor; lymphocyte-function antigen-2; rosette receptor
UniProt Protein Name	T-cell surface antigen CD2
UniProt Gene Name	CD2
UniProt Synonym Gene Names	SRBC
UniProt Entry Name	CD2_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.