

Rat anti-Mouse CD2 Monoclonal Antibody | anti-CD2 antibody

Anti-Ms CD2 FITC

CATALOG # AAA129143	HOST Rat	REACTIVITY Mouse	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

CD2; Monoclonal Antibody; Anti-Ms CD2 FITC; LFA-2; Ly37; Ly-37; CD2 molecule; anti-CD2 antibody

PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Mouse
Clonality	Monoclonal
Isotype	Rat IgG2b lambda
Clone Number	RM2-5
Specificity	The rat monoclonal antibody RM2-5 recognizes an extracellular epitope of CD2, a 50kDa glycoprotein present on the human peripheral blood T lymphocytes and NK cells; also expressed by all thymocytes.
Purity/Purification	The purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Form/Format	Phosphate buffered saline (PBS) solution with 15mM sodium azide
Concentration	0.5mg/ml (varies by lot)
Applicable Applications for anti-CD2 antibody	FCM/FACS (Flow Cytometry)
Conjugation	FITC
Immunogen	murine thymocytes
Preparation and Storage	Store in the dark at 2-8 degree C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.

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.
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References	*Wallin J, Eibel H, Neubüser A, Wilting J, Koseki H, Balling R: Pax1 is expressed during development of the thymus epithelium and is required for normal T-cell maturation. Development. 1996 Jan;122(1):23-30., URL: http://www.ncbi.nlm.nih.gov/pubmed/term=wallin+j+, *Altin JG, Pagler EB, Parish CR: Evidence for cell surface association of CD2 and LFA-1 (CD11a/CD18) on T lymphocytes. Eur J Immunol. 1994 Feb;24(2):450-7., URL: https://www.ncbi.nlm.nih.gov/pubmed/7905418, *Sasada T, Reinherz EL: A critical role for CD2 in both thymic selection events and mature T cell Functional Application (FUNC)tion. J Immunol. 2001 Feb 15;166(4):2394-403., URL: https://www.ncbi.nlm.nih.gov/pubmed/11160298, *Cho HJ, Edmondson SG, Miller AD, Sellars M, Alexander ST, Somersan S, Punt JA: Cutting edge: identification of the targets of clonal deletion in an unmanipulated thymus. J Immunol. 2003 Jan 1;170(1):10-3., URL: https://www.ncbi.nlm.nih.gov/pubmed/term=edmondso, *Fassett MS, Jiang W, D'Alise AM, Mathis D, Benoist C: Nuclear receptor Nr4a1 modulates both regulatory T-cell (Treg) differentiation and clonal deletion. Proc Natl Acad Sci U S A. 2012 Mar 6; 109(10):3891-6., URL: https://www.pnas.org/content/109/10/3891.shot, *Milstein O, Tseng SY, Starr T, Llodra J, Nans A, Liu M, Wild MK, van der Merwe PA, Stokes DL, Reisner Y, Dustin ML: Nanoscale increases in CD2-CD48-mediated intermembrane spacing decrease adhesion and reorganize the immunological synapse. J Biol Chem. 2008 Dec 5;283(49):34414-22., URL: http://www.ncbi.nlm.nih.gov/pubmed/term=milstein+, *Lee KM, Forman JP, McNerney ME, Stepp S, Kuppireddi S, Guzier D, Latchman YE, Sayegh MH, Yagita H, Park CK, Oh SB, Wülfing C, Schatzle J, Mathew PA, Sharpe AH, Kumar V: Requirement of homotypic NK-cell interactions through 2B4(CD244)/CD48 in the generation of NK effector Functional Application (FUNC)tions. Blood. 2006 Apr 15;107(8):3181-8., URL: http://www.ncbi.nlm.nih.gov/pubmed/term=forman+jp, *Cibotti R, Bhandoola A, Ginter TI, Sharrow SO, Singer A: CD8 coreceptor extinction in signaled CD4(+)CD8(+) thymocytes: coordinate roles for both transcriptional and posttranscriptional regulatory mechanisms in developing thymocytes. Mol Cell Biol. 2000 Jun;20(11):3852-9., URL: http://www.ncbi.nlm.nih.gov/pubmed/10805728, *Izon DJ, Punt JA, Xu L, Karnell FG, Allman D, Myung PS, Boerth NJ, Pui JC, Koretzky GA, Pear WS: Notch1 regulates maturation of CD4+ and CD8+ thymocytes by modulating TCR signal strength. Immunity. 2001 Mar;14(3):253-64., URL: http://www.ncbi.nlm.nih.gov/pubmed/11290335
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NCBI AND UNIPROT INFORMATION

NCBI GI #	115976
NCBI GeneID	12481
UniProt Accession #	P08920 ; Q61394
Molecular Weight	38,415 Da
NCBI Official Full Name	T-cell surface antigen CD2
NCBI Official Synonym Full Names	CD2 antigen
NCBI Official Symbol	Cd2
NCBI Official Synonym Symbols	Ly37; LFA-2; Ly-37
NCBI Protein Information	T-cell surface antigen CD2; LFA-3 receptor; lymphocyte antigen 37; T-cell surface antigen T11/Leu-5
UniProt Protein Name	T-cell surface antigen CD2
UniProt Gene Name	Cd2
UniProt Synonym Gene Names	Ly-37; Ly-37
UniProt Entry Name	CD2_MOUSE

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://stage.aaabiotech.com/monoclonal/cd2-antibody-clone-rm2-5-flow-cytometry-elisa/129143>