

Mouse anti-Human CD4 Monoclonal Antibody | anti-CD4 antibody

Anti-Hu CD4 FITC

CATALOG # AAA129145	HOST Mouse	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

CD4; Monoclonal Antibody; Anti-Hu CD4 FITC; T4/Leu-3; L3T4; CD4 molecule; anti-CD4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	EM4
Specificity	The mouse monoclonal antibody EM4 recognizes an extracellular epitope of CD4 antigen, a 55kDa transmembrane glycoprotein expressed on a subset of T lymphocytes ("helper" T-cells) and also on monocytes, tissue macrophages and granulocytes. This antibody does not block Leu3a and OKT4 binding, and blocks HIV-1 infection in cell to cell system. Very strong flow cytometry staining, brighter than Leu3a, OKT4 and other.
Purity/Purification	The purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide
Applicable Applications for anti-CD4 antibody	FCM/FACS (Flow Cytometry)
Conjugation	FITC
Immunogen	Normal human blood lymphocytes
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-CD4 antibody	CD4 (T4) is a single chain transmembrane glycoprotein and belongs to immunoglobulin supergene family. In extracellular region there are 4 immunoglobulin-like domains (1 Ig-like V-type and 3 Ig-like C2-type). Transmembrane region forms 25 aa, cytoplasmic tail consists of 38 aa. Domains 1,2 and 4 are stabilized by disulfide bonds. The intracellular domain of CD4 is associated with p56Lck, a Src-like protein tyrosine kinase. It was described that CD4 segregates into specific detergent-resistant T-cell membrane microdomains. Extracellular ligands: MHC class II molecules (binds to CDR2-like region in CD4 domain 1); HIV envelope protein gp120 (binds to CDR2-like region in CD4 domain 1); IL-16 (binds to CD4 domain 3), Human seminal plasma glycoprotein gp17 (binds to CD4 domain 1), L-selectin. Intracellular ligands: p56LckCD4 is a co-receptor involved in immune response (co-receptor activity in binding to MHC class II molecules) and HIV infection (human immunodeficiency virus; CD4 is primary receptor for HIV-1 surface glycoprotein gp120). CD4 regulates T-cell activation, T/B-cell adhesion, T-cell differentiation, T-cell selection and signal transduction. Defects in antigen presentation (MHC class II) cause dysfunctional Application (FUNC)tion of CD4+ T-cells and their almost complete absence in patients blood, tissue and organs (SCID immunodeficiency).
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References	*Filatov AV, Krotov GI, Zgoda VG, Volkov Y: Fluorescent immunoprecipitation analysis of cell surface proteins: a methodology compatible with mass-spectrometry. J Immunol Methods. 2007 Jan 30;319(1-2):21-33., URL: https://www.ncbi.nlm.nih.gov/pubmed/term=filatov+ *Millan J, Cerny J, Horejsi V, Alonso MA: CD4 segregates into specific detergent-resistant T-cell membrane microdomains. Tissue Antigens. 1999 Jan;53(1):33-40., URL: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10835167
NCBI GeneID	920
NCBI Accession #	NP_000607.1
NCBI GenBank Nucleotide #	NM_000616.4
UniProt Accession #	P01730; Q4ZGK2; Q5U066; Q9UDE5; B2R737; D3DUS5
Molecular Weight	51,111 Da
NCBI Official Full Name	T-cell surface glycoprotein CD4 isoform 1
NCBI Official Synonym Full Names	CD4 molecule
NCBI Official Symbol	CD4
NCBI Official Synonym Symbols	CD4mut
NCBI Protein Information	T-cell surface glycoprotein CD4; CD4 receptor; CD4 antigen (p55); T-cell surface antigen T4/Leu-3
UniProt Protein Name	T-cell surface glycoprotein CD4
UniProt Gene Name	CD4
UniProt Entry Name	CD4_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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Online datasheet: <https://www.aaabiotech.com/monoclonal/cd4-antibody-clone-em4-flow-cytometry-elisa/129145>