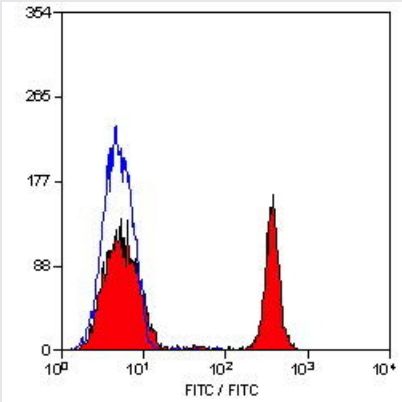
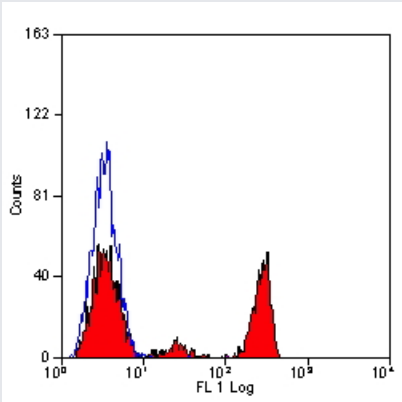
CD4 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

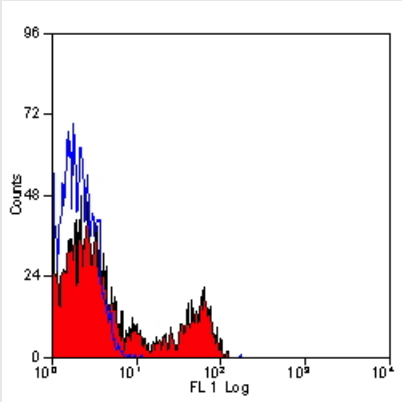
Product Name	CD4, Monoclonal Antibody
Full Product Name	CD4 (CD4 Antigen, CD4 Molecule, CD4 Receptor, CD4mut, T Cell Surface Antigen T4/Leu3, T Cell Antigen T4, T Cell Surface Glycoprotein CD4) (HRP)
Product Gene Name	anti-CD4 antibody
Clonality	Monoclonal
Isotype	IgG1
Clone Number	3H757
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. Labeled with horseradish peroxidase (HRP).
Purity/Purification	Purified by protein A affinity chromatography from tissue culture supernatant.
Specificity	Recognizes human CD4.
Preparation and Storage	Store at -20 degree C.
Molecular Weight	51,111 Da
Chromosome Location	Chromosome: 12; NC_000012.11 (6898638..6929976). Location: 12p13.31
OMIM	186940
3D Structure	ModBase 3D Structure for P01730
Immunogen	Human PHA blasts.
Conjugate	HRP
Product Categories/Family for anti-CD4 antibody	Antibodies; CD Markers
Applications Tested/Suitable for anti-CD4 antibody	Flow Cytometry (FC/FACS), Immunohistochemistry (IHC)
Related Product Information for anti-CD4 antibody	MBS6250551 is an antibody targeting CD4. Also known as CD4 (CD4 Antigen, CD4 Molecule, CD4 Receptor, CD4mut, T Cell Surface Antigen T4/Leu3, T Cell Antigen T4, T Cell Surface Glycoprotein CD4) (HRP). Reactive in Human. Host: Mouse.
Product References and Citations for anti-CD4 antibody	1. Zarkesh-Esfahani, H. et al. (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. J. Immunol.167:4593 - 4599, 2. Voehringer, D. et al. (2002) Lack of proliferative capacity of human effector and memory T cells expressing killer cell lectin-like receptor G1 (KLRG1). Blood.100: 3698 - 3702, 3. Piatier-Tonneau, D. (1997) CD4 workshop panel report. In Leucocyte Typing VI. White cell differentiation antigens. Edited by Kishimoto, T., Kikutani, H., von dem Borne, A.E.G.Kr., Goyert, A.M., Mason, D.Y., Miyasaka, M., Moretta, L., Okumura, K., Shaw, S., Springer, T.A., Sugamura, K., Zola, H. Garland publishing Inc. New York & London.
Other Notes	Small volumes of anti-CD4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



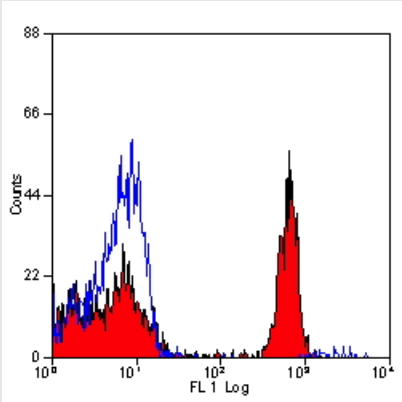
Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4



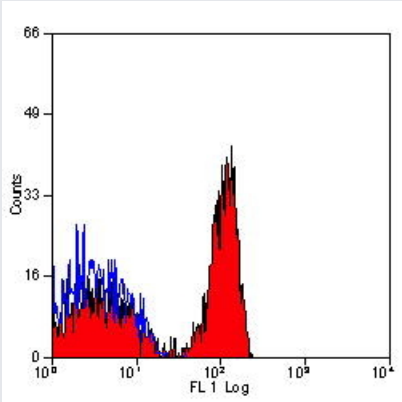
Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4: Alexa Fluor® 488



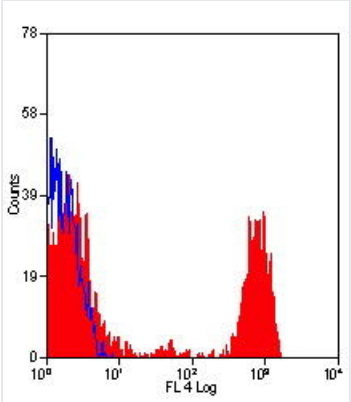
Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4: Pacific Blue®



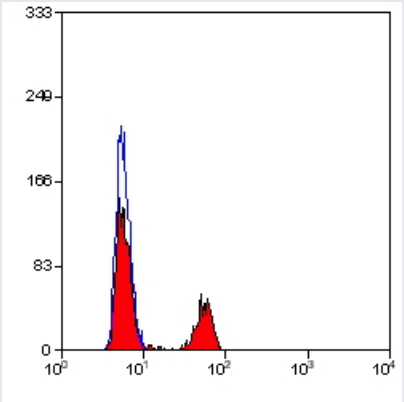
Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4: AZIDE FREE



Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4: RPE - Alexa Fluor® 750



Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4: RPE-Alexa 647



Testing Data of anti-CD4 antibody
Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4:ALEXA 405

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD4. It may not necessarily be applicable to this product.

NCBI GI #	10835167
NCBI GeneID	920
NCBI Accession #	NP_000607.1
UniProt Primary Accession #	P01730
UniProt Secondary Accession #	Q4ZGK2; Q5U066; Q9UDE5; B2R737; D3DUS5
UniProt Related Accession #	P01730
GenBank Nucleotide #	NM_000616.4
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
UniProt Protein Name	T-cell surface glycoprotein CD4
UniProt Synonym Protein Names	T-cell surface antigen T4/Leu-3
Protein Family	T-cell surface glycoprotein
UniProt Gene Name	CD4
UniProt Entry Name	CD4_HUMAN
NCBI Protein Information	T-cell surface glycoprotein CD4; CD4 receptor; CD4 antigen (p55); T-cell surface antigen T4/Leu-3
NCBI Summary for CD4	This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigenes and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, Aug 2010]

UniProt Comments for CD4	CD4: Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts. Associates with LCK. Binds to HIV-1 gp120 and to P4HB/PDI and upon HIV-1 binding to the cell membrane, is part of P4HB/PDI- CD4-CXCR4-gp120 complex. Interacts with HIV-1 Envelope polyprotein gp160 and protein Vpu. Interacts with Human Herpes virus 7 capsid proteins. Interacts with PTK2/FAK1; this interaction requires the presence of HIV-1 gp120. Protein type: Cell surface; Membrane protein, integral Chromosomal Location of Human Ortholog: 12p13.31 Cellular Component: T cell receptor complex; endoplasmic reticulum membrane; endoplasmic reticulum lumen; early endosome; integral to membrane; plasma membrane; external side of plasma membrane; lipid raft Molecular Function: protein binding; transmembrane receptor activity; protein homodimerization activity; enzyme binding; zinc ion binding; extracellular matrix structural constituent; coreceptor activity; receptor activity; glycoprotein binding; protein kinase binding; MHC class II protein binding Biological Process: maintenance of cellular protein localization; viral reproduction; positive regulation of interleukin-2 biosynthetic process; cytokine production; T cell selection; positive regulation of calcium-mediated signaling; induction by virus of cell-cell fusion in host; defense response to Gram-negative bacterium; signal transduction; T cell receptor signaling pathway; enzyme linked receptor protein signaling pathway; regulation of defense response to virus by virus; positive regulation of peptidyl-tyrosine phosphorylation; cell surface receptor linked signal transduction; positive regulation of protein kinase activity; T cell costimulation; protein palmitoleylation; innate immune response; immune response; entry into host cell; transmembrane receptor protein tyrosine kinase signaling pathway; regulation of T cell activation; T cell differentiation Disease: Okt4 Epitope Deficiency
Research Articles on CD4	**1.** Promoter methylation regulates SAMHD1 gene expression in human CD4+ T cells
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/cd4/6250551