

Rabbit Anti-Human CD4 Monoclonal Antibody

Cat. No. CABTT-005RH **Lot. No.** (See product label)

SPECIFICATION

Species	Human
Source	Rabbit
Product Overview	Monoclonal Antibody toCD4; Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.
Antigen Description	This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens 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.
Clone	FQS7277
Host animal	Rabbit
Cross Reactivity	Human
Isotype	IgG1

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Immunogen	Recombinant fragment corresponding to the extracellular domain of Human CD4
Positive control	Human fetal thymus and Human lymph node lysates, THP-1 cells
Application	WB; ICC/IF; Flow Cyt
Sequencesimilarities	Contains 3 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Post-translationalmodifications	Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.
Cellular localization	Cell membrane. Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation. Cell surface expression is also down-modulated by HIV-1 Envelope polyprotein gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum.
Form	Liquid
Purity	Tissue culture supernatant
Storage Buffer	pH: 7.40; Preservative: 0.01% Sodium azide; Constituents: 49% PBS, 50% Glycerol, 0.05% BSA
Storage	Store at -20°C. Stable for 12 months at -20°C
nullValue_other	<p>Function</p> <p>MHC class II protein binding; coreceptor activity; enzyme binding; extracellular matrix structural constituent; glycoprotein binding; protein binding; protein homodimerization activity; protein kinase binding; receptor activity; transm</p>

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membrane signaling receptor activity; zinc ion binding

GENE INFORMATION

Gene Name	CD4 CD4 molecule [Homo sapiens]
Official Symbol	CD4
Synonyms	CD4; CD4 molecule; CD4mut; T-cell surface glycoprotein CD4; CD4 receptor; CD4 antigen (p55); T-cell surface antigen T4/Leu-3; CD 4; CD4 (L3T4); CD4 antigen; CD4+ Lymphocyte deficiency; CD4_HUMAN; CD4mut; L3T4; Leu3; Ly-4; Lymphocyte antigen CD4; MGC165891; OTTHUMP00000238897; p55; T cell antigen T4; T cell differentiation antigen L3T4; T cell OKT4 deficiency; T cell surface antigen T4/Leu 3; cell surface glycoprotein CD4; T cell surface antigen T4/Leu 3; W3/25; W3/25 antigen
Gene ID	920
mRNA Refseq	NM_000616
Protein Refseq	NP_000607
MIM	186940
UniProt ID	P01730
Chromosome Location	12p13.31
Pathway	Adaptive Immune System; Alpha-defensins; Antigen processing and presentation; Arf1 pathway, organism-specific; Binding and entry of HIV virion; CXCR4-mediated signaling events; Cell adhesion molecules (CAMs); Defensins;

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Downstream TCR signaling; Nef Mediated CD4 Down-regulation

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