

Rabbit Anti-Human CD4 Monoclonal Antibody

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

SPECIFICATION

Product Overview	
Species	Human
Source	Rabbit
Product Overview	Monoclonal Antibody to CD4; 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

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Isotype	IgG1
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	Function MHC class II protein binding; coreceptor activity; enzyme binding; extracellular matrix structural constituent; glycoprotein binding; protein binding; protei

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n homodimerization activity; protein kinase binding; receptor activity; transmembrane 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;

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CXCR4-mediated signaling events; Cell adhesion molecules (CAMs); Defensins;
Downstream TCR signaling; Nef Mediated CD4 Down-regulation

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