



CD4 Monoclonal Antibody

Catalog No	YP-Ab-13803
Isotype	IgG
Reactivity	Human
Applications	FCM;ELISA
Gene Name	CD4
Immunogen	Purified recombinant fragment of human CD4 expressed in E. Coli.
Specificity	CD4 Monoclonal Antibody detects endogenous levels of CD4 protein.
Formulation	Purified antibody in PBS containing 0.03% sodium azide.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	2H4A2;CD4 molecule;CD4mut;T-cell surface antigen T4/Leu-3;T-cell surface glycoprotein CD4;CD4;CD antigen CD4
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Localizes to lipid rafts (PubMed:12517957, PubMed:9168119). 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.
Tissue Specificity	Highly expressed in T-helper cells. The presence of CD4 is a hallmark of T-helper cells which are specialized in the activation and growth of cytotoxic T-cells, regulation of B cells, or activation of phagocytes. CD4 is also present in other immune cells such as macrophages, dendritic cells or NK cells.
Function	function:Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts., miscellaneous:Primary receptor for HIV-1.,online information:CD4 entry, PTM:Palmitoylation and association with LCK contribute to the enrichment of



CD4 in lipid rafts.,similarity:Contains 1 Ig-like V-type (immunoglobulin-like) domain.,similarity:Contains 3 Ig-like C2-type (immunoglobulin-like) domains., subcellular location: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.,subunit:Associates with LCK. Binds to HIV-1 gp120 and to P4HB/PDI and upon HIV-1 binding to t

Background

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. [provided by RefSeq, Aug 2010],

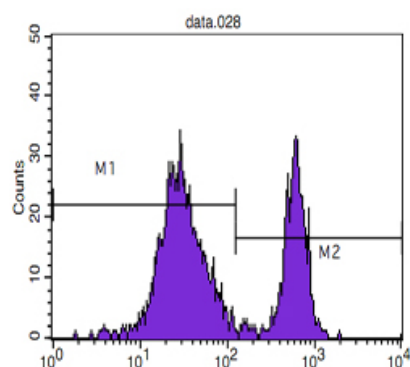
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Flow cytometric analysis of blood T cells using CD4 Monoclonal Antibody (M2) and negative control (M1).