Best Tools for immunology Research

CD4 (PTR2055) mouse mAb

Catalog No :	YM4261
Reactivity :	Human;
Applications :	WB;IF;ELISA
Target :	CD4
Gene Name :	CD4
Protein Name :	T-cell surface glycoprotein CD4 (T-cell surface antigen T4/Leu-3) (CD antigen CD4)
Human Gene Id :	920
Human Swiss Prot No :	P01730
Mouse Gene Id :	12504
Mouse Swiss Prot No :	P06332
Rat Gene Id :	24932
Rat Swiss Prot No :	P05540
Immunogen :	Synthesized peptide derived from human CD4. AA range: 1-100
Specificity :	This antibody detects endogenous levels of CD4 protein.
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Mouse, Monoclonal/IgG1, kappa
Dilution :	WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000
Purification :	Protein G

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 51kD

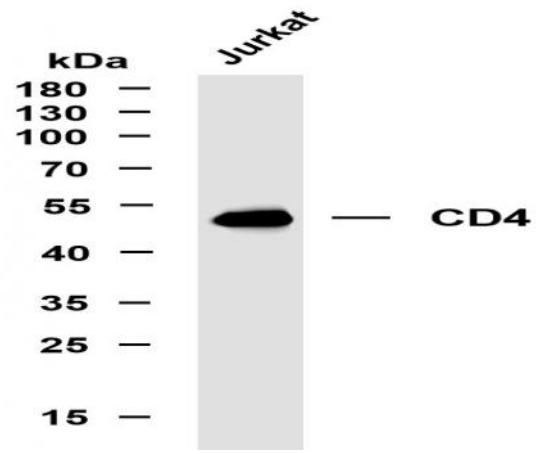
Background : CD4 molecule(CD4) Homo sapiens This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigenes and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, 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],

Function : Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cyt

Subcellular Location : Membranous

Expression : 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.

Products Images



Whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CD4 (PTR2055) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: Jurkat