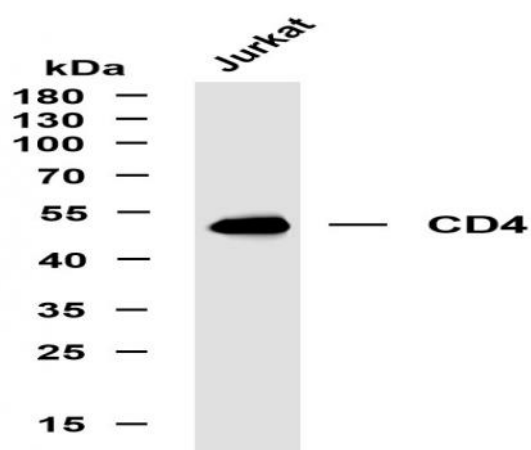


CD4 (PTR2055) Mouse mAb

Catalog No :	YM4261
Reactivity :	Human
Applications :	WB;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 at Only Human
Formulation :	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source :	Monoclonal, Mouse IgG1, Kappa
Dilution :	WB 1:500-2000,ELISA 1:5000-20000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	51kD
Observed Band :	51kD
Background :	<p>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],</p>
Function :	<p>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</p>
Subcellular Location :	<p>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.</p>
Expression :	<p>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.</p>

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 Predicted band size: 51kDa Observed band size: 51kDa