CD4 Rabbit mAb (AbFluor 488)

Catalog No	YP-rAb-18124
Isotype	IgG
Reactivity	Human
Applications	IF
Gene Name	CD4
Protein Name	T-cell surface glycoprotein CD4 (T-cell surface antigen T4/Leu-3) (CD antigen CD4)
Purification Process	Protein A
Specificity	Endogenous
Formulation	
Source	Monoclonal, Rabbit,IgG
Dilution	IF 1:100-500
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	T-cell surface glycoprotein CD4 ; T-cell surface antigen T4/Leu-3 ; CD antigen CD4 ;
Observed Band	55kD
Calculated Molecular Weight	51kD
Cell Pathway	Membrane
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	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, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages. ; (Microbial infection) Primary receptor for human immunodeficiency virus-1 (HIV-1) . Down-regulated by HIV-1 Vpu . Acts as a receptor for Human Herpes virus 7/HHV-7 .
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],
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.

Immunofluorescence analysis of human tonsil. 1,primary Antibody was diluted at 1:100(4～C overnight).