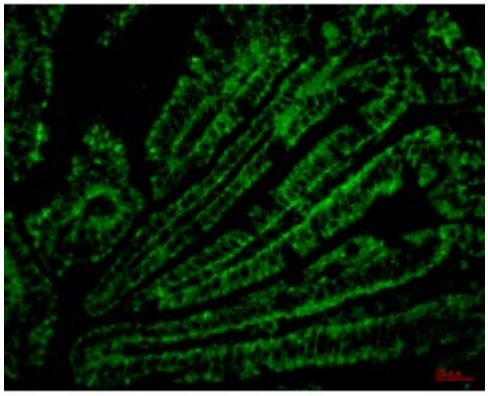
Anti-CD4 antibody



Description	CD4 is a protein encoded by the CD4 gene which is approximately 51,1 kDa. CD4 is localised to the cell membrane and endoplasmic reticulum. It is involved in the TGF-beta pathway, PEDF induced signalling and the T-cell receptor signalling pathway. It is 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. It initiates or augments 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. CD4 is expressed in the blood, cells of the nervous system, liver, pancreas and spleen. STJ96972 was developed from clone 11A1 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. This antibody detects endogenous CD4 proteins.

Model	STJ96972
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	IHC
Immunogen	Synthetic Peptide
Gene ID	920
Gene Symbol	CD4
Dilution range	IHC 1:200
Specificity	The antibody detects endogenous CD4 proteins.
Purification	The antibody was affinity-purified from mouse ascites by affinity-

	chromatography using specific immunogen.
Clone ID	11A1
Note	For Research Use Only (RUO).
Protein Name	T-cell surface glycoprotein CD4 T-cell surface antigen T4/Leu-3 CD antigen CD4
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1678OMIM:186940
Alternative Names	T-cell surface glycoprotein CD4 T-cell surface antigen T4/Leu-3 CD antigen CD4
Function	Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.; (Microbial infection) Acts as a receptor for human immunodeficiency virus-1 . Down-regulated by HIV-1 Vpu . Acts as a receptor for Human Herpes virus 7/HHV-7 .
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.
Post-translational Modifications	Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.