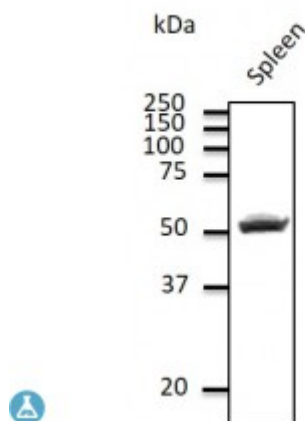


Anti-CD4 antibody



Description

Goat polyclonal antibody to CD4. CD4 is a member of the immunoglobulin superfamily, a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and a receptor for the human immunodeficiency virus. This protein is expressed not only on the surface of T helper cells and regulatory T cells but also on monocytes, macrophages and dendritic cells. It functions to initiate or amplify 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.

Model	STJ140023
Host	Goat
Reactivity	Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian
Applications	WB
Immunogen	Purified recombinant peptide derived from within 50 to 235 aa, corresponding to the external domain of human CD4 produced in E. coli.
Immunogen Region	50-235 aa
Gene ID	920
Gene Symbol	CD4
Dilution range	Western blot 1:500-1:2,000 Immunofluorescence ND Immunohistochemistry (paraffin) ND Immunohistochemistry (frozen) ND
Purification	This antibody is epitope-affinity purified from goat antiserum.
Note	For research use only (RUO).

Protein Name	T-cell surface glycoprotein CD4 T-cell surface antigen T4/Leu-3 CD antigen CD4
Molecular Weight	52 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, 20% glycerol and 0.05% sodium azide.
Concentration	2 mg/mL
Storage Instruction	Store at -20°, and avoid repeated 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 (PubMed:2214026, PubMed:16331979, PubMed:9641677). Down-regulated by HIV-1 Vpu (PubMed:17346169). Acts as a receptor for Human Herpes virus 7/HHV-7 (PubMed:7909607). {ECO:0000269 PubMed:16331979, ECO:0000269 PubMed:17346169, ECO:0000269 PubMed:2214026, ECO:0000269 PubMed:7909607, ECO:0000269 PubMed:9641677}.
Cellular Localization	Cell membrane Single-pass type I membrane protein . 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. {ECO:0000269 PubMed:1618861}.