

**CD4 (phospho Ser433) rabbit pAb****Cat#: orb770862 (Manual)**

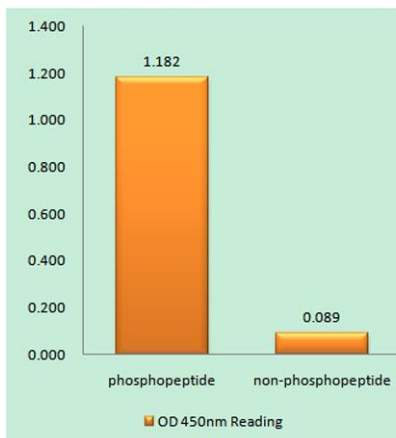
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<b>Product Name</b>	CD4 (phospho Ser433) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse
<b>Recommended dilutions</b>	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CD4 around the phosphorylation site of Ser433. AA range:401-450
<b>Specificity</b>	Phospho-CD4 (S433) Polyclonal Antibody detects endogenous levels of CD4 protein only when phosphorylated at S433.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	T-cell surface glycoprotein CD4
<b>Gene Name</b>	CD4
<b>Cellular localization</b>	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.

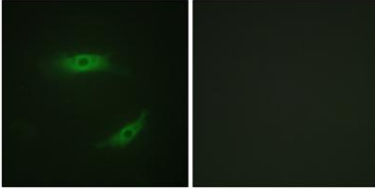
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	
<b>Human Gene ID</b>	920
<b>Human Swiss-Prot Number</b>	P01730
<b>Alternative Names</b>	CD4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3; CD antigen CD4

### Background

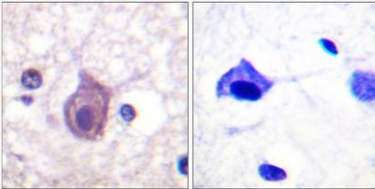
This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also 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],



**Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CD4 (Phospho-Ser433) Antibody**



**Immunofluorescence analysis of HepG2 cells, using CD4 (Phospho-Ser433) Antibody. The picture on the right is blocked with the phospho peptide.**



**Immunohistochemistry analysis of paraffin-embedded human brain, using CD4 (Phospho-Ser433) Antibody. The picture on the right is blocked with the phospho peptide.**