

# CD4 (Phospho Ser433) Rabbit pAb

CatalogNo: YP1138

# Key Features

Host SpeciesRabbit

Reactivity

Human,Mouse

Applications

IHC,IF,ELISA

MW • 51kD (Calculated)

Isotype • lgG

### Recommended Dilution Ratios

IHC 1:100-1:300 IF 1:200-1:1000 ELISA 1:40000 Not yet tested in other applications.

### **Storage**

Storage\*-15°C to -25°C/1 year(Do not lower than -25°C)FormulationLiquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## **Basic Information**

Clonality Polyclonal

# Immunogen Information

ImmunogenThe antiserum was produced against synthesized peptide derived from human CD4<br/>around the phosphorylation site of Ser433. AA range:401-450

**Specificity** Phospho-CD4 (S433) Polyclonal Antibody detects endogenous levels of CD4 protein only when phosphorylated at S433. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RMsQI

# Target Information

Gene name	CD4			
Protein Name	T-cell surface glycoprotein CD4			
	Organism	Gene ID	UniProt ID	
	Human	<u>920;</u>	<u>P01730;</u>	
	Mouse	<u>12504;</u>	<u>P06332;</u>	
Cellular Localization	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.			
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	Function:Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.,miscellaneous:Primary receptor for HIV-1.,online information:CD4 entry,PTM:Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.,similarity:Contains 1 Ig-like V-type (immunoglobulin- like) domain.,similarity:Contains 3 Ig-like C2-type (immunoglobulin-like) domains.,subcellular location: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.,subunit:Associates with LCK. Binds to HIV-1 gp120 and to P4HB/PDI and upon HIV-1 binding to the cell membrane, is part of P4HB/PDI-CD4-CXCR4-gp120 complex. Interacts with HIV-1 Envelope polyprotein gp160 and protein Vpu. Interacts with Human Herpes virus 7 capsid proteins.,			

## Validation Data



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.

### **Contact information**

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **CD4 (Phospho Ser433) Rabbit pAb** 

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents