

Product datasheet for **AP20210PU-N**

CD4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to amino acids 391-440 of Human CD4.
Specificity:	This antibody antibody detects endogenous levels of CD4 protein (region surrounding Ala429).
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 51 kDa
Gene Name:	CD4 molecule
Database Link:	Entrez Gene 12504 Mouse Entrez Gene 920 Human P01730



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Background:

Cluster of Differentiation 4 (CD4) is a glycoprotein composed of an amino-terminal extracellular domain (four domains: D1-D4 with Ig-like structures), a transmembrane part and a short cytoplasmic tail. CD4 is expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages and dendritic cells, and plays an important role in the development and activation of T cells. On T cells, CD4 is the co-receptor for the T cell receptor (TCR), and these two distinct structures recognize the Antigen–Major Histocompatibility Complex (MHC). Specifically, the D1 domain of CD4 interacts with the β 2-domain of the MHC class II molecule. CD4 ensures specificity of the TCR–antigen interaction, prolongs the contact between the T cell and the antigen presenting cell and recruits the tyrosine kinase Lck, which is essential for T cell activation.

Synonyms:

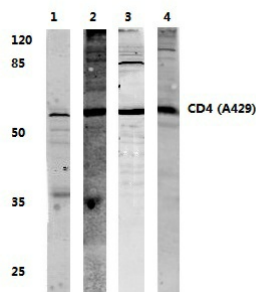
T-cell surface antigen T4/Leu-3

Protein Families:

Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transmembrane

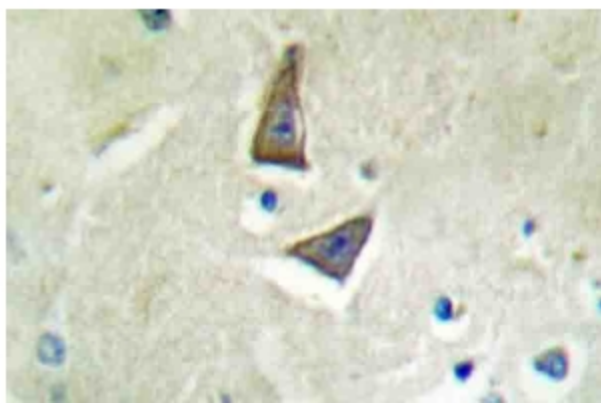
Protein Pathways:

Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

Product images:

Western blot analysis of CD4 (pAla429) antibody

Lane1: Jurkat whole cell lysate
Lane2:sp2/0 whole cell lysate
Lane3: PC12 whole cell lysate treated with Lps
Lane4: H9C2 whole cell lysate treated with Lps
CD4 (A429) pAb at 1:500 dilution



Immunohistochemical analysis using CD4 antibody in Paraffin-embedded human brain tissue.