

AP20210PU-N**Polyclonal Antibody to CD4 - Aff - Purified**

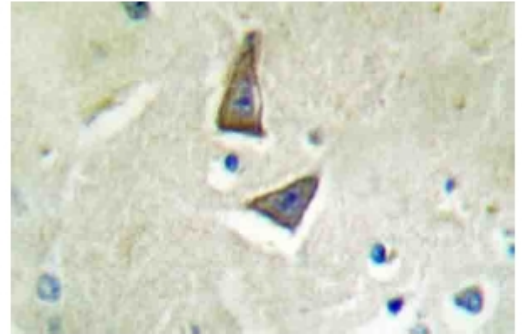
Alternate names:	T-cell surface antigen T4/Leu-3, T-cell surface glycoprotein CD4
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	Cluster of Differentiation 4 (CD4) is a glycoprotein composed of an amino-terminal extracellular domain (four domains: D1-D4 with Ig-like structures), a transmembrane 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.
Uniprot ID:	P01730
NCBI:	NP_000607
GenElD:	920
Host:	Rabbit
Immunogen:	Synthetic peptide corresponding to amino acids 391-440 of Human CD4.
Format:	State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Purification: Affinity Chromatography using epitope-specific immunogen Buffer System: Phosphate buffered saline (PBS), pH~7.2 Preservatives: 0.05% Sodium Azide
Applications:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Immunohistochemistry on Paraffin Sections: 1/50-1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	~ 51 kDa
Specificity:	This antibody detects endogenous levels of CD4 protein (region surrounding Ala429). Species: Human, Mouse. Other species not tested.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

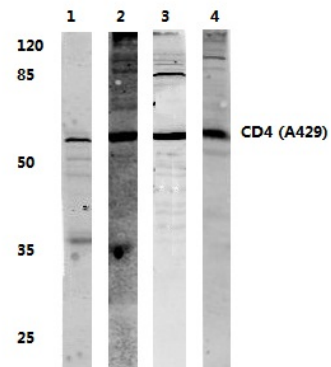
1. J. Invest. Dermatol. (2015) Nov 135 11: 2764-74 PMID: 26134945.
2. Int. Arch. Allergy Immunol. (2015) 167 1: 29-40 PMID: 26112225.
3. Urol. Oncol. (2013) Aug 31 6: 883-93 PMID: 21924648.
4. Evid Based Complement Alternat Med (2013) 2013 : 907016 PMID: 24027597.
5. J. Urol. (2012) Mar 187 3: 1071-9 PMID: 22266013.
6. Urology (2011) Sep 78 3: 722.e1-722.e6 PMID: 21741685.
7. Cancer Immunol. Immunother. (2010) Nov 59 11: 1697-705 PMID: 20683592.

Pictures:

Immunohistochemical analysis using CD4 antibody (Cat.-No. AP20210PU-N) in Paraffin-embedded human brain tissue.



Western blot analysis of CD4 (pAla429) antibody Cat.-No.- AP20210PU-N.



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