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CD4 Rabbit pAb

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Catalog # AP52089

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P06332
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from the middle of mouse CD4
Epitope Specificity	231-330/457
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Single-pass type I membrane protein. Note=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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigenes 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].The CD4 antigen is involved in the recognition of MHC class II molecules and is a co-receptor for HIV. CD4 is primarily expressed in a subset of T-lymphocytes, also referred to as T helper cells, but may also be expressed by other cells in the immune system, such as monocytes, macrophages, and dendritic cells. At the tissue level, CD4 expression may be detected in thymus, lymph nodes, tonsils, and spleen, and also in specific regions of the brain, gut, and other non-lymphoid tissues. CD4 functions to initiate or augment the early phase of T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase, Lck. It may also function as an important mediator of direct neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcripts have been identified in this gene [RefSeq, July 2017].

Additional Information

Other Names	T-cell surface glycoprotein CD4, T-cell differentiation antigen L3T4, T-cell surface antigen T4/Leu-3, CD4, Cd4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Background

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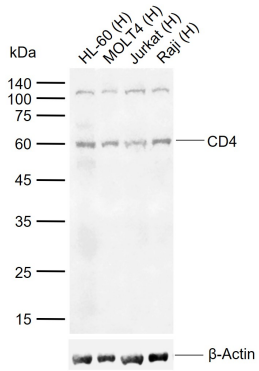
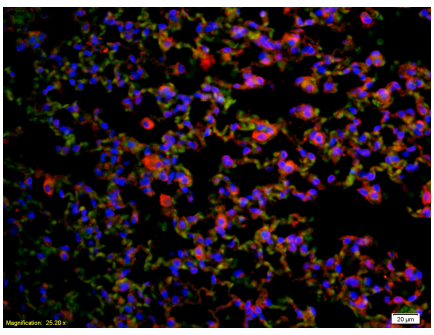
References

Tourvieille B.,et al.Science 234:610-614(1986).
Littman D.R.,et al.Nature 325:453-455(1987).
Parnes J.R.,et al.Immunol. Rev. 100:109-127(1987).
Gorman S.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 84:7644-7648(1987).
Ansari-Lari M.A.,et al.Genome Res. 8:29-40(1998).

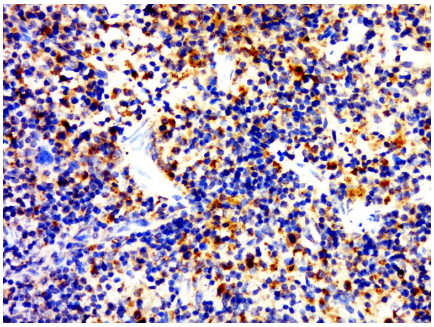
Images



Sample:
Lane 1: Human HL-60 cell lysates
Lane 2: Human MOLT4 cell lysates
Lane 3: Human Jurkat cell lysates
Lane 4: Human Raji cell lysates
Primary: Anti-CD4 (AP52089) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 48 kDa>
Observed band size: 60 kDa



Tissue/cell: rat lung tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-CD4(mouse, rat) Polyclonal Antibody, Unconjugated(AP52089) 1:200, overnight at 4℃; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(AP52089-Cy3)used at 1:200 dilution for 40 minutes at 37℃. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Paraformaldehyde-fixed, paraffin embedded (rat spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD4) Polyclonal Antibody, Unconjugated (AP52089) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.