



# CD4 Monoclonal Antibody(11A1)

Catalog No	BYab-13833
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF
Gene Name	CD4
Protein Name	T-cell surface glycoprotein CD4
Immunogen	Synthetic Peptide of CD4
Specificity	The antibody detects endogenous CD4 proteins.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC 1:200 IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CD4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3; CD4
Observed Band	
Cell Pathway	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 glycoprotein 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)

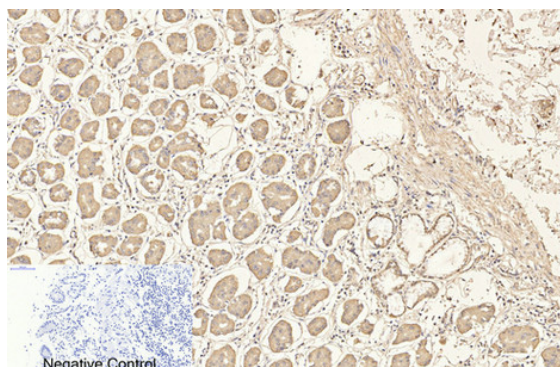
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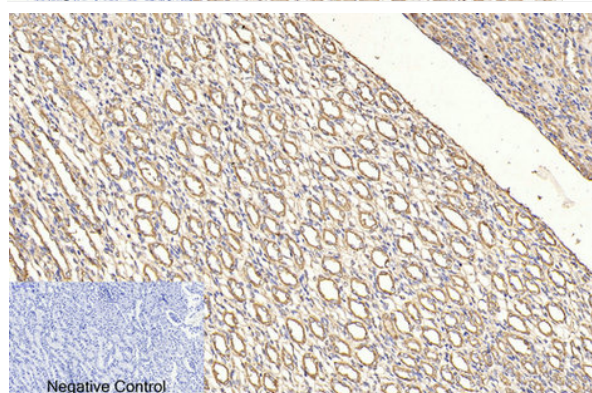
	<p>domain.,similarity:Contains 3 Ig-like C2-type (immunoglobulin-like) domains.,subcellular location:Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation. Cell surface expression 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 t</p>
Background	<p>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],</p>
matters needing attention	<p>Avoid repeated freezing and thawing!</p>
Usage suggestions	<p>This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.</p>



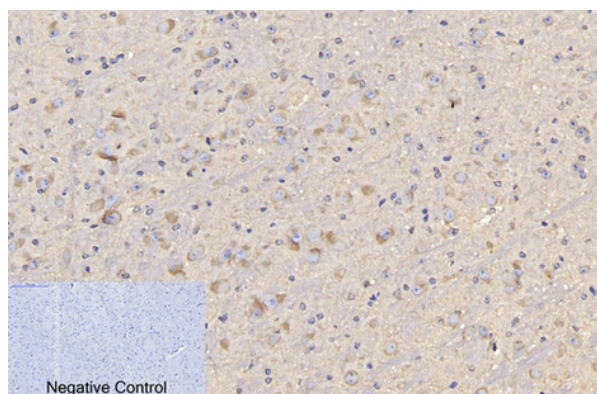
## Products Images



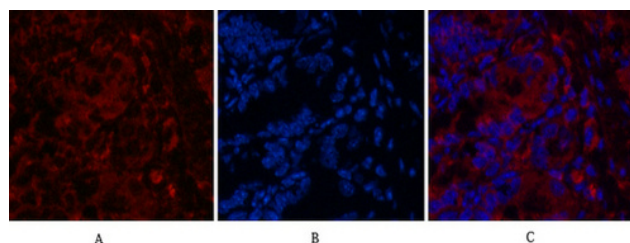
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,CD4 Monoclonal Antibody(11A1) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



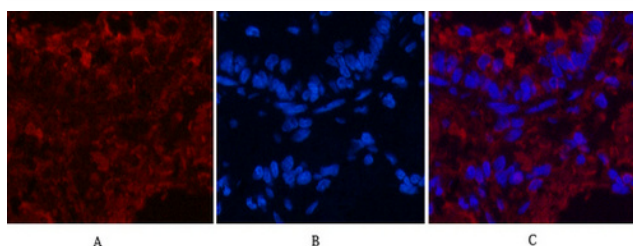
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,CD4 Monoclonal Antibody(11A1) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-brain tissue. 1,CD4 Monoclonal Antibody(11A1) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-colon tissue. 1,CD4 Monoclonal Antibody(11A1)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Rat-lung tissue. 1,CD4 Monoclonal Antibody(11A1)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

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