

## CaMKIV mouse mAb

<b>Catalog No :</b>	YM1297
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB
<b>Target :</b>	CaMKIV
<b>Fields :</b>	>>Calcium signaling pathway;>>cAMP signaling pathway;>>Longevity regulating pathway;>>Apelin signaling pathway;>>Osteoclast differentiation;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Cholinergic synapse;>>Oxytocin signaling pathway;>>Aldosterone synthesis and secretion;>>Amphetamine addiction;>>Alcoholism;>>Glioma
<b>Gene Name :</b>	camk4
<b>Human Gene Id :</b>	814
<b>Human Swiss Prot No :</b>	Q16566
<b>Mouse Swiss Prot No :</b>	P08414
<b>Immunogen :</b>	Purified recombinant human CaMKIV protein fragments expressed in E.coli.
<b>Specificity :</b>	This antibody detects endogenous levels of CaMKIV and does not cross-react with related proteins.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	wb 1:1000
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 55kD

**Cell Pathway :** Calcium;Long-term potentiation;Neurotrophin;

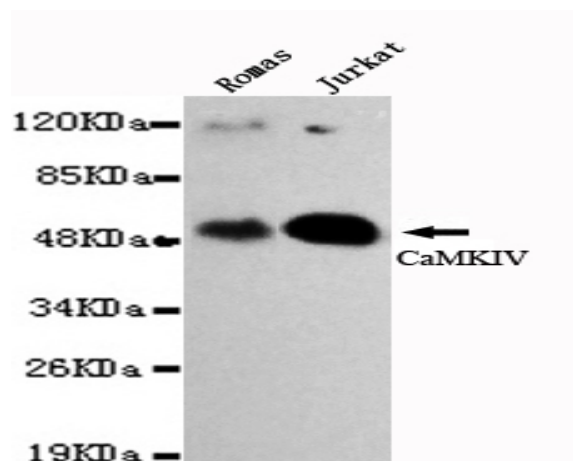
**Background :** The product of this gene belongs to the serine/threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. This enzyme is a multifunctional serine/threonine protein kinase with limited tissue distribution, that has been implicated in transcriptional regulation in lymphocytes, neurons and male germ cells. [provided by RefSeq, Jul 2008],

**Function :** catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Activated by Ca(2+)/calmodulin. Binding of calmodulin may release intrasteric autoinhibition. Must be phosphorylated to be maximally active. Phosphorylated by CAMKK1 or CAMKK2. Autophosphorylation of the N-terminus is required for full activation. In part, activity is independent on Ca(2+)/calmodulin and autophosphorylation of Ser-336 allows to switch to a Ca(2+)/calmodulin-independent state (By similarity). Probably inactivated by serine/threonine protein phosphatase 2A.,function:Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade. May be involved in transcriptional regulation. May be involved in regulation of microtubule dynamics. In vitro, phosphorylates CREB1, CREBBP, PRM2, MEF2A, MEF2D and STMN1/OP18. May be involved in spermatogenesis. May play a role i

**Subcellular Location :** Cytoplasm. Nucleus. Localized in hippocampal neuron nuclei. In spermatids, associated with chromatin and nuclear matrix (By similarity). .

**Expression :** Expressed in brain, thymus, CD4 T-cells, testis and epithelial ovarian cancer tissue.

## Products Images



Western blot detection of CaMKIV in Romas and Jurkat cell lysates using CaMKIV mouse mAb (1:1000 diluted).Predicted band size:52KDa.Observed band size:55KDa.