

CaMKIV mouse mAb

Catalog No :	YM1297
Reactivity :	Human
Applications :	WB
Target :	CaMKIV
Fields :	>>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
Gene Name :	camk4
Human Gene Id :	814
Human Swiss Prot No :	Q16566
Mouse Swiss Prot No :	P08414
Immunogen :	Purified recombinant human CaMKIV protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of CaMKIV and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	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;

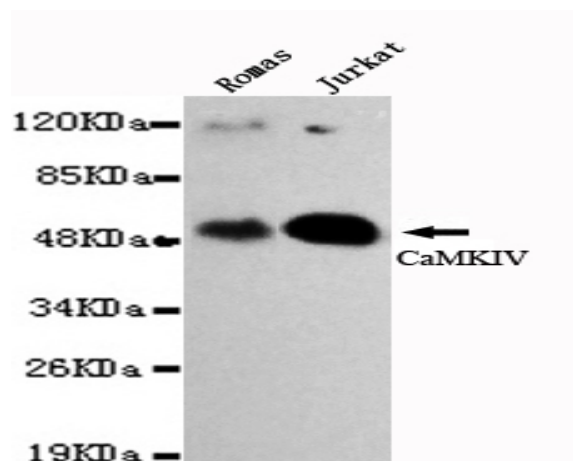
Background : The product of this gene belongs to the serine/threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. This enzyme is a multifunctional serine/threonine protein kinase with limited tissue distribution, that has been implicated in transcriptional 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.