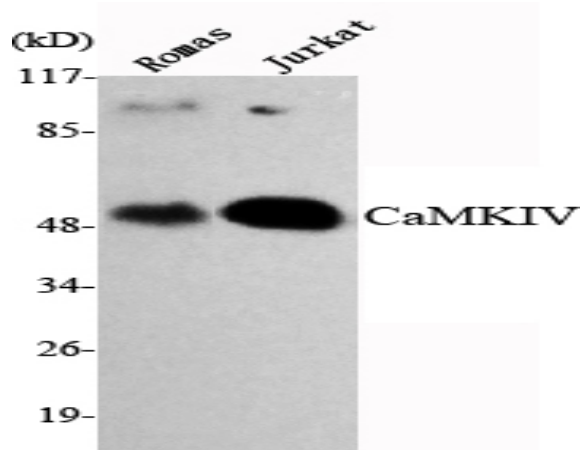


CaMKIV Monoclonal Antibody

Catalog No :	YM1018
Reactivity :	Human;Mouse;Rat;Chicken;Dog;Pig
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
Protein Name :	Calcium/calmodulin-dependent protein kinase type IV
Human Gene Id :	814
Human Swiss Prot No :	Q16566
Mouse Swiss Prot No :	P08414
Rat Gene Id :	25050
Rat Swiss Prot No :	P13234
Immunogen :	Purified recombinant human CaMKIV protein fragments expressed in E.coli.
Specificity :	CaMKIV Monoclonal Antibody detects endogenous levels of CaMKIV protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:1000 - 1:2000. Not yet tested in other applications.

Purification :	Affinity purification
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	52kD
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 analysis using CaMKIV Monoclonal Antibody against Romas, Jurkat cell lysate.