



# CaMKIV mouse mAb

<b>Catalog No</b>	BYab-14219
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB
<b>Gene Name</b>	camk4
<b>Protein Name</b>	
<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>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	wb 1:1000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Brain Ca(2 ) calmodulin dependent protein kinase type 4;Brain Ca(2 ) calmodulin dependent protein kinase type IV;Brain Ca -calmodulin dependent protein kinase type IV;Calcium / calmodulin dependent protein kinase type 4 catalytic chain;Calcium / calmodulin dependent protein kinase type IV catalytic chain; Calcium/calmodulin dependent protein kinase IV;Calcium/calmodulin dependent protein kinase type IV;Calcium/calmodulin-dependent protein kinase type IV;CAM kinase 4;CAM kinase GR;CAM kinase IV;CAM kinase-GR;CaMK 4;CAMK GR;CaMK IV;CaMK4;CaMKGR;IV;KCC4_HUMAN; MGC36771.
<b>Observed Band</b>	55kD
<b>Cell Pathway</b>	Cytoplasm. Nucleus. Localized in hippocampal neuron nuclei. In spermatids, associated with chromatin and nuclear matrix (By similarity).
<b>Tissue Specificity</b>	Expressed in brain, thymus, CD4 T-cells, testis and epithelial ovarian cancer tissue.
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein..enzyme regulation:Activated by Ca(2+)/calmodulin. Binding of calmodulin may release

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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

#### 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],

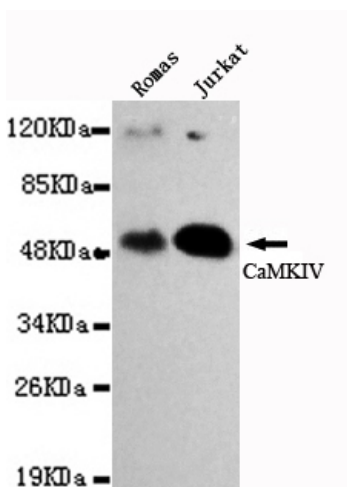
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## 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.

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