



CaMKII β/γ Polyclonal Antibody

Catalog No	YP-Ab-14687
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;ELISA
Gene Name	CAMK2B/CAMK2G
Protein Name	Calcium/calmodulin-dependent protein kinase type II subunit beta/gamma
Immunogen	The antiserum was produced against synthesized peptide derived from human CaMK2 beta/gamma. AA range:509-558
Specificity	CaMKII β/γ Polyclonal Antibody detects endogenous levels of CaMKII β/γ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	CAMK2G; CAMK; CAMK-II; CAMKG; Calcium/calmodulin-dependent protein kinase type II subunit gamma; CaM kinase II subunit gamma; CaMK-II subunit gamma; CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit bet
Observed Band	62kD
Cell Pathway	Sarcoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side .
Tissue Specificity	Expressed in skeletal muscle.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Autophosphorylation of CAMK2 plays an important role in the regulation of the kinase activity.,function:CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily.,similarity:Contains 1 protein kinase domain.,subunit:CAMK2 is composed of four different chains: alpha, beta, gamma, and delta. The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits.,



Background

The product of this gene is one of the four subunits of an enzyme which belongs to the serine/threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Many alternatively spliced transcripts encoding different isoforms have been described but the full-length nature of all the variants has not been determined.[provided by RefSeq, Mar 2011],

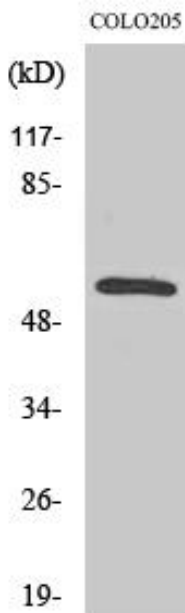
matters needing attention

Avoid repeated freezing and thawing!

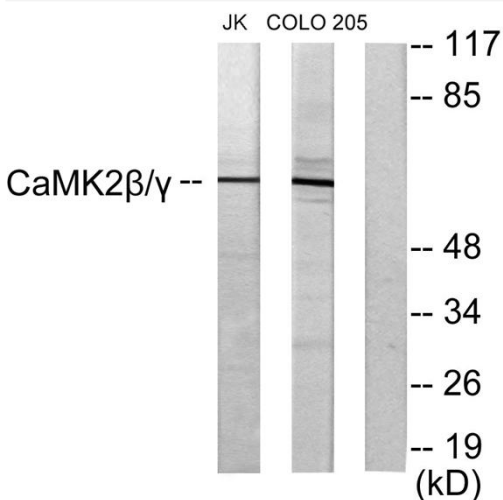
Usage suggestions

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

Products Images



Western Blot analysis of various cells using CaMKIIβ/γ Polyclonal Antibody



Western blot analysis of lysates from COLO205 and Jurkat cells, using CaMK2 beta/gamma Antibody. The lane on the right is blocked with the synthesized peptide.