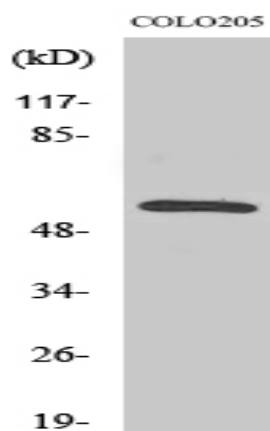


CaMKII β / γ Polyclonal Antibody

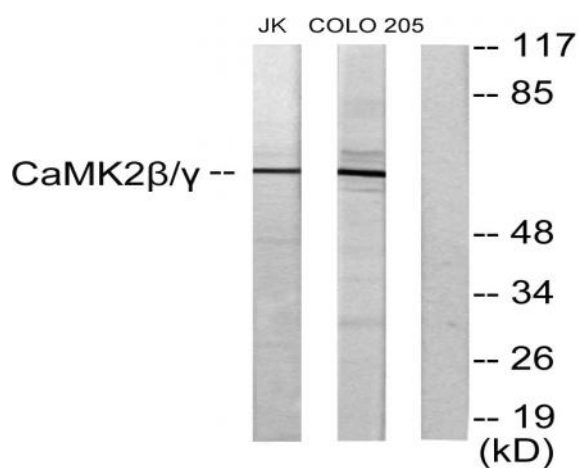
Catalog No :	YT0625
Reactivity :	Human;Mouse;Rat
Applications :	WB;IF;ELISA
Target :	CaMKII β / γ
Fields :	>>ErbB signaling pathway;>>Calcium signaling pathway;>>cAMP signaling pathway;>>HIF-1 signaling pathway;>>Oocyte meiosis;>>Necroptosis;>>Adrenergic signaling in cardiomyocytes;>>Wnt signaling pathway;>>Axon guidance;>>Circadian entrainment;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Cholinergic synapse;>>Dopaminergic synapse;>>Olfactory transduction;>>Inflammatory mediator regulation of TRP channels;>>Insulin secretion;>>GnRH signaling pathway;>>Melanogenesis;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Aldosterone synthesis and secretion;>>Cushing syndrome;>>Gastric acid secretion;>>Parkinson disease;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction;>>Tuberculosis;>>Pathways in cancer;>>Proteoglycans in cancer;>>Glioma;>>Diabetic cardiomyopathy;>>Lipid and atherosclerosis
Gene Name :	CAMK2B/CAMK2G
Protein Name :	Calcium/calmodulin-dependent protein kinase type II subunit beta/gamma
Human Gene Id :	818/816
Human Swiss Prot No :	Q13555/Q13554
Mouse Gene Id :	12325/12323
Rat Gene Id :	171140/24245
Rat Swiss Prot No :	P11730/P08413
Immunogen :	The antiserum was produced against synthesized peptide derived from human CaMK2 beta/gamma. AA range:509-558

Specificity :	<u>CaMKIIβ/γ Polyclonal Antibody detects endogenous levels of CaMKIIβ/γ protein.</u>
Formulation :	<u>Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.</u>
Source :	<u>Polyclonal, Rabbit,IgG</u>
Dilution :	<u>WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.</u>
Purification :	<u>The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.</u>
Concentration :	<u>1 mg/ml</u>
Storage Stability :	<u>-15°C to -25°C/1 year(Do not lower than -25°C)</u>
Observed Band :	<u>62kD</u>
Cell Pathway :	<u>ErbB_HER;Calcium;Oocyte meiosis;WNT;WNT-T CELLLong-term potentiation;Neurotrophin;Olfactory transduction;GnRH;Melanogenesis;Glioma;</u>
Background :	<u>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],</u>
Function :	<u>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.,</u>
Subcellular Location :	<u>Sarcoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side .</u>
Expression :	<u>Expressed in skeletal muscle.</u>

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.