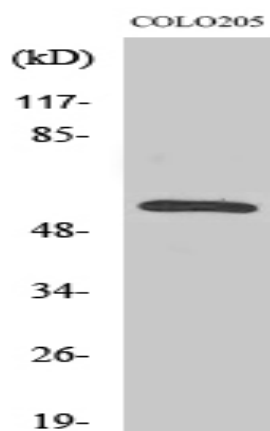


## CaMKIIβ/γ Polyclonal Antibody

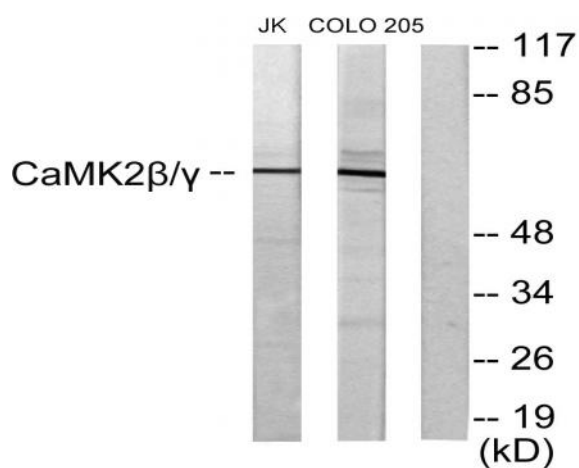
<b>Catalog No :</b>	YT0625
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	CaMKIIβ/γ
<b>Fields :</b>	>>ErbB signaling pathway;>>Calcium signaling pathway;>>cAMP signaling pathway;>>HIF-1 signaling pathway;>>Oocyte meiosis;>>Necroptosis;>>Adrenergic signaling in cardiomyocytes;>>Wnt 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
<b>Gene Name :</b>	CAMK2B/CAMK2G
<b>Protein Name :</b>	Calcium/calmodulin-dependent protein kinase type II subunit beta/gamma
<b>Human Gene Id :</b>	818/816
<b>Human Swiss Prot No :</b>	Q13555/Q13554
<b>Mouse Gene Id :</b>	12325/12323
<b>Rat Gene Id :</b>	171140/24245
<b>Rat Swiss Prot No :</b>	P11730/P08413
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human CaMK2 beta/gamma. AA range:509-558

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

## 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.