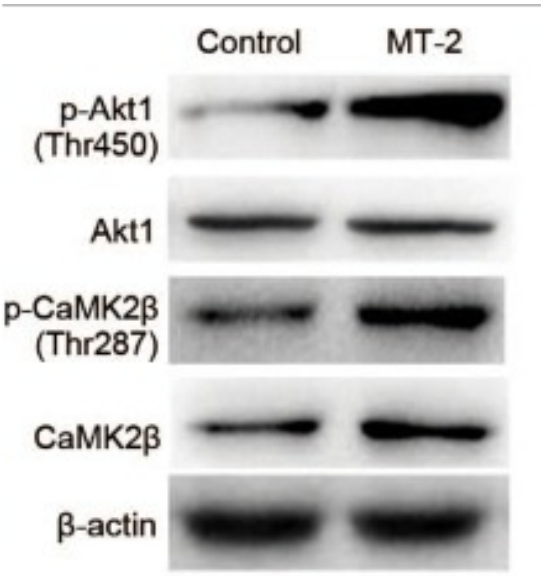
CaMKIIβ/γ/δ Polyclonal Antibody

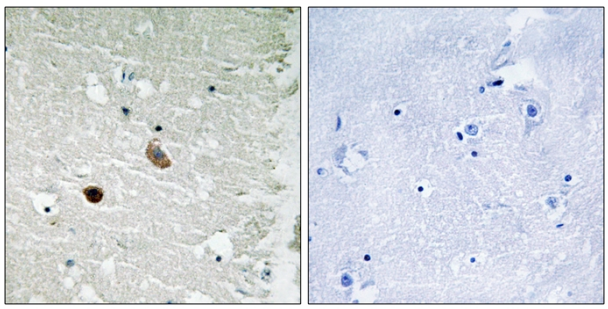
Catalog No	BYab-14688
Isotype	IgG
Reactivity	Human;Mouse;Rat;Pig
Applications	WB;IHC;IF;ELISA
Gene Name	CAMK2B
Protein Name	Calcium/calmodulin-dependent protein kinase type II subunit beta
Immunogen	The antiserum was produced against synthesized peptide derived from human CaMK2-beta/gamma/delta. AA range:253-302
Specificity	CaMKIIβ/γ/δ Polyclonal Antibody detects endogenous levels of CaMKIIβ/γ/δ 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	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; CaM kinase II subunit beta; CaMK-II subunit beta; CAMK2G; CAMK; CAMK-II; CAMKG; Calcium/calmodulin-dependent protein kinase type II subunit gamma;
Observed Band	50+65kD
Cell Pathway	Cytoplasm, cytoskeleton . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Sarcoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, synapse . In slow-twitch muscle, evenly distributed between longitudinal SR and junctional SR.
Tissue Specificity	Widely expressed. Expressed in adult and fetal brain. Expression is slightly lower in fetal brain. Expressed in skeletal muscle.
Function	alternative products:The variable region of the CAMK2B protein is encoded by at least 7 exons (V1 to V7). Alternative splicing within this region gives rise to CAMK2B isoforms,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. Member of the NMDAR signaling complex in excitatory synapses, it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.,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
Background	The product of this gene 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 beta chain. It is possible that distinct isoforms of this chain have different cellular localizations and interact differently with calmodulin. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014],
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.

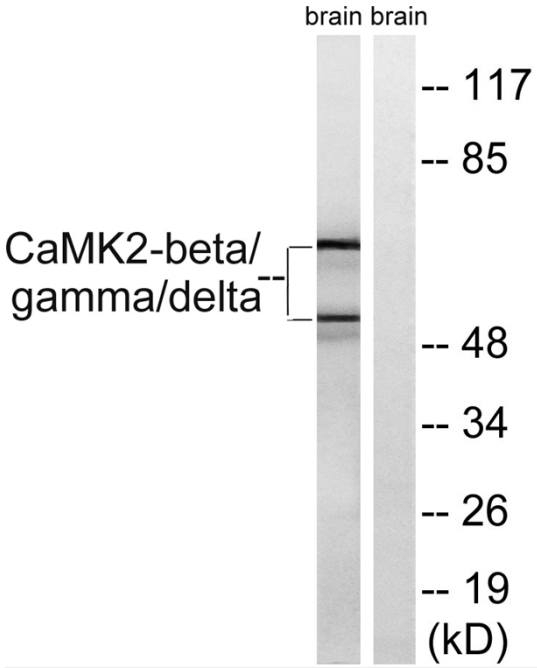
Products Images



Zhou, Dong-Dong, et al. "Metallothionein-2 is associated with the amelioration of asthmatic pulmonary function by acupuncture through protein phosphorylation." Biomedicine & Pharmacotherapy 123 (2020): 109785.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using CaMK2-beta/gamma/delta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from rat brain cells, using CaMK2-beta/gamma/delta Antibody. The lane on the right is blocked with the synthesized peptide.