

KCC2B Polyclonal Antibody

Catalog No: YN1861

Reactivity: Human; Rat; Mouse;

Applications: WB;ELISA

Target: KCC2B

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;>>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 CAM2 CAMK2 CAMKB

Protein Name: Calcium/calmodulin-dependent protein kinase type II subunit beta (CaM kinase

II subunit beta) (CaMK-II subunit beta) (EC 2.7.11.17)

Human Gene Id: 816

Human Swiss Prot Q13554

No:

Mouse Swiss Prot P28652

No:

Rat Swiss Prot No: P08413

Immunogen: Synthesized peptide derived from part region of human protein

Specificity: KCC2B Polyclonal Antibody detects endogenous levels of protein.



Formulation : Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000 ELISA 1:5000-20000

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 73kD

Cell Pathway : ErbB_HER;Calcium;Oocyte meiosis;WNT;WNT-T CELLLong-term

potentiation; Neurotrophin; Olfactory transduction; GnRH; Melanogenesis; Glioma;

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],

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

Subcellular Location:

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.

Expression: Widely expressed. Expressed in adult and fetal brain. Expression is slightly lower



in fetal brain. Expressed in skeletal muscle.

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