

CaMKK2 Polyclonal Antibody

Catalog No: YT0624

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: CaMKK2

Fields: >>Autophagy - animal;>>AMPK signaling pathway;>>Longevity regulating

pathway;>>Adipocytokine signaling pathway;>>Oxytocin signaling

pathway;>>Alcoholic liver disease;>>Alcoholism

Gene Name: CAMKK2

Protein Name: Calcium/calmodulin-dependent protein kinase kinase 2

Q96RR4

Q8C078

Human Gene Id: 10645

Human Swiss Prot

No:

Mouse Gene ld: 207565

Mouse Swiss Prot

No:

Rat Gene Id: 83506

Rat Swiss Prot No: 088831

Immunogen: The antiserum was produced against synthesized peptide derived from human

CAMKK2. AA range:381-430

Specificity: CaMKIIß Polyclonal Antibody detects endogenous levels of CaMKIIß protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

1/3



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: 65kD

Cell Pathway: AMPK

Background: The product of this gene belongs to the Serine/Threonine protein kinase family,

and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. The major isoform of this gene plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. Protein products of this gene also phosphorylate AMP-activated protein kinase (AMPK). This gene has its strongest expression in the brain and influences signalling cascades involved with learning and memory, neuronal differentiation and migration, neurite outgrowth, and synapse formation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. The identified

isoforms differ in their ability to undergo autophosphorylation and to phosphorylate downstream kinases. [provided by RefSeq, Jul 2012],

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The

autoinhibitory domain overlaps with the calmodulin binding region and may be involved in intrasteric autoinhibition.,domain:The RP domain (arginine/proline-rich) is involved in the recognition of CAMKI and CAMK4 as substrates.,enzyme regulation:Activated by Ca(2+)/calmodulin. Binding of calmodulin may releave intrasteric autoinhibition. Autophosphorylation does not alter activity or regulation

by Ca(2+)/calmodulin. In part, activity is independent on

Ca(2+)/calmodulin.,function:Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Isoform 1, isoform 2 and isoform 3 phosphorylate CAMK1 and CAMK4. Isoform 3 phosphorylates CAMK1D. Isoform 4, isoform 5 and isoform 6 lacking part of the calmodulin-binding domain are inactive. See

Subcellular Location:

Nucleus . Cytoplasm . Cell projection, neuron projection . Predominantly nuclear in unstimulated cells, relocalizes into cytoplasm and neurites after forskolin

induction...

Expression: Ubiquitously expressed with higher levels in the brain. Intermediate levels are

detected in spleen, prostate, thyroid and leukocytes. The lowest level is in lung.

Tag: orthogonal

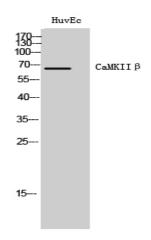
Sort: 3105



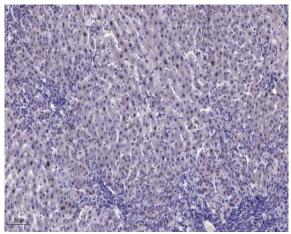
1

No4:

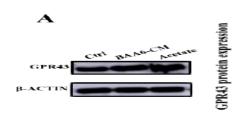
Products Images



Western Blot analysis of HuvEc cells using CaMKII β Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).



Bifidobacterium animalis subsp. lactis A6 Enhances Fatty Acid β-Oxidation of Adipose Tissue to Ameliorate the Development of Obesity in Mice Nutrients. 2022 Jan;14(3):598. WB Mouse epididymal adipose tissues

