

Product Name: CaMKII β / γ / δ (phospho Thr287) Rabbit Polyclonal Antibody
Catalog #: APRab04356



Summary

Production Name	CaMKII β / γ / δ (phospho Thr287) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, IHC, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CAMK2B
Alternative Names	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;
Gene ID	816/818/817
SwissProt ID	Q13554/Q13555/Q13557. The antiserum was produced against synthesized peptide derived from human CaMK2-beta/gamma/delta around the phosphorylation site of Thr287. AA range:253-302

Application

Product Name: CaMKII β / γ / δ (phospho Thr287) Rabbit Polyclonal Antibody
Catalog #: APRab04356



Dilution Ratio

IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000. Not yet tested in other applications.

Molecular Weight

50+65kD

Background

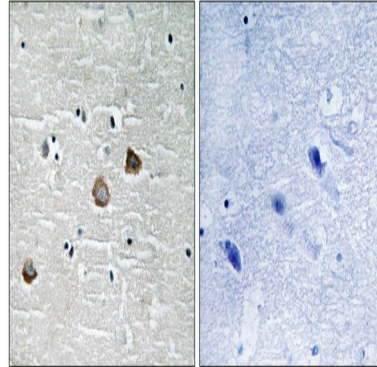
The product of this gene belongs to the serine/threonine protein kinase family and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells, the enzyme is composed of four different chains: 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], 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 chains: alpha, beta, gamma, and delta. The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. Interacts with SYNGAP1 and CAMK2N2 (By similarity). Interacts with MPDZ., tissue specificity: Widely expressed. Expressed in adult and fetal brain. Expression is slightly lower in fetal brain.,

Research Area

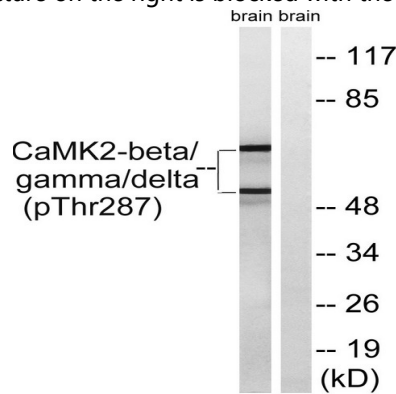
ErbB_HER; Calcium; Oocyte meiosis; WNT; WNT-T CELL Long-term potentiation; Neurotrophin; Olfactory transduction; GnRH; Melanogenesis; Glioma;

Image Data

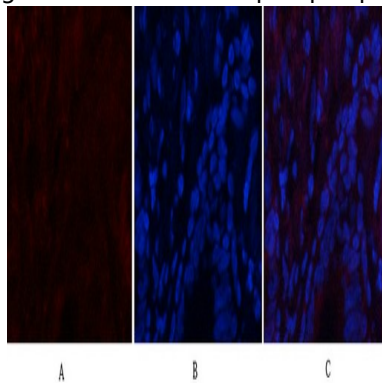
Product Name: CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Rabbit Polyclonal Antibody
Catalog #: APRab04356



Immunohistochemistry analysis of paraffin-embedded human brain, using CaMK2-beta/gamma/delta (Phospho-Thr287) Antibody. The picture on the right is blocked with the phospho peptide.

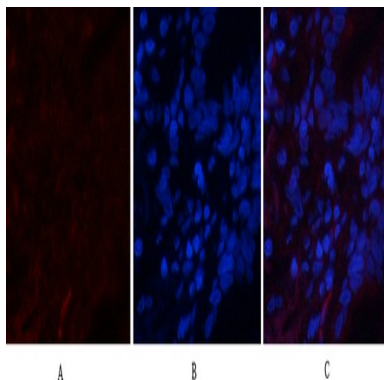


Western blot analysis of lysates from rat brain, using CaMK2-beta/gamma/delta (Phospho-Thr287) Antibody. The lane on the right is blocked with the phospho peptide.

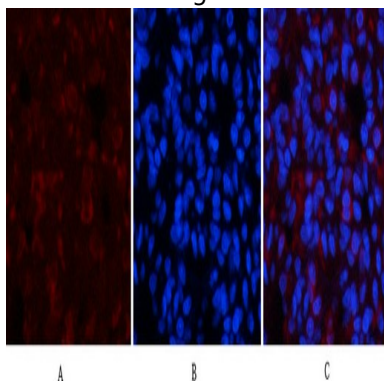


Immunofluorescence analysis of human-lung tissue. 1, CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

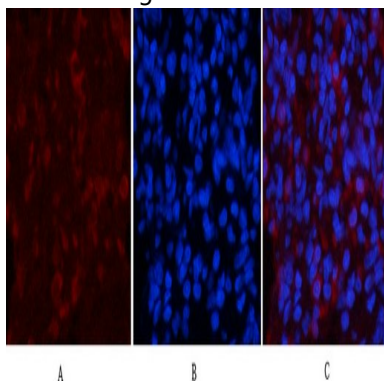
Product Name: CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Rabbit Polyclonal Antibody
Catalog #: APRab04356



Immunofluorescence analysis of human-lung tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

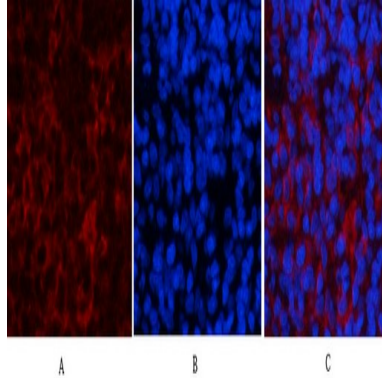


Immunofluorescence analysis of rat-lung tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

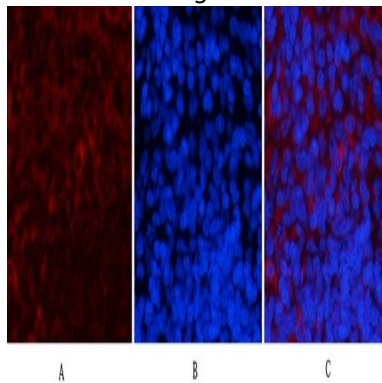


Immunofluorescence analysis of rat-lung tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

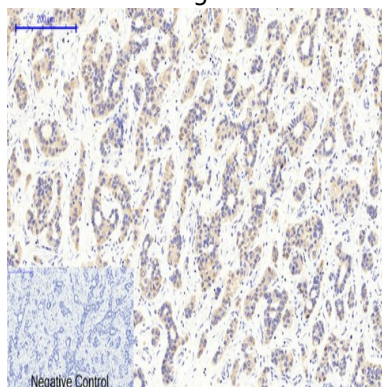
Product Name: CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Rabbit Polyclonal Antibody
Catalog #: APRab04356



Immunofluorescence analysis of rat-spleen tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-spleen tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,CaMKII $\beta/\gamma/\delta$ (phospho Thr287) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.

**Product Name: CaMKII β / γ / δ (phospho Thr287) Rabbit
Polyclonal Antibody
Catalog #: APRab04356**



Note

For research use only.