

Product datasheet for **TA336581**

CAMK2B Rat Polyclonal Antibody

Product data:

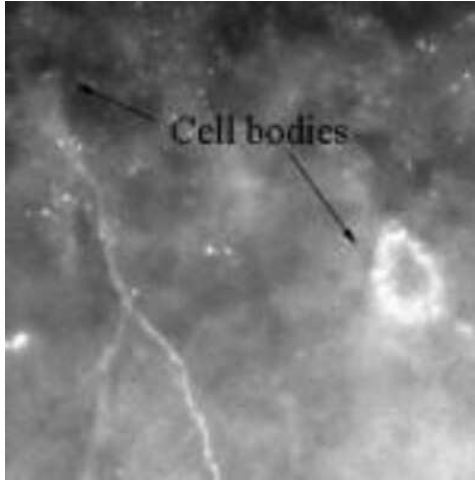
Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Immunohistochemistry, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence: 1:100, Western Blot
Reactivity:	Human, Mouse, Rat
Host:	Rat
Clonality:	Polyclonal
Immunogen:	This antibody was developed against a synthetic peptide corresponding to amino acids 499-513 (VRRGSGTPEAEAPRQ) of human CAMKII beta.
Formulation:	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Whole antisera
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	calcium/calmodulin dependent protein kinase II beta
Database Link:	NP_742075 Entrez Gene 12323 Mouse Entrez Gene 24245 Rat Entrez Gene 816 Human Q13554
Background:	The multifunctional CaMKII beta, or Ca ²⁺ /calmodulin-dependent protein kinase II, is a well known effector of calcium- and calmodulin- mediated functions. It is present in many tissues but is most abundant in the brain. CaMKII 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. Autophosphorylation plays an important role in the regulation of the kinase activity. CaMKII is required for synaptic plasticity, as in Long Term Potentiation (LTP), a cellular model for learning and memory.
Synonyms:	CAM2; CAMK2; CAMKB
Protein Families:	Druggable Genome, Protein Kinase



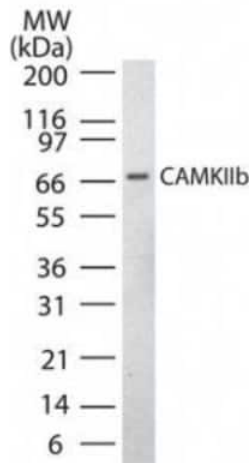
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Protein Pathways:

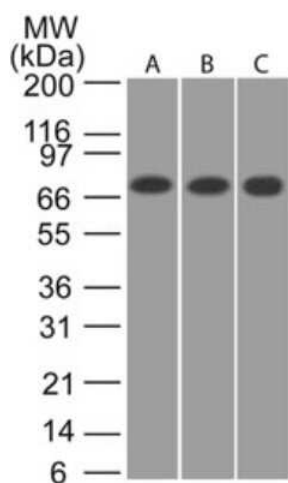
Calcium signaling pathway, ErbB signaling pathway, Glioma, GnRH signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Wnt signaling pathway

Product images:


Immunocytochemistry/Immunofluorescence: CaMKII beta Antibody TA336581 - Staining of CAMKIIb using TA336581 in rat hippocampal neurons at a dilution of 1:100, note that staining is rather weak.



Western Blot: CaMKII beta Antibody TA336581 - Analysis of CAMKIIb in rat brain lysate using TA336581 at 1:2000.



Western Blot: CaMKII beta Antibody TA336581 - Analysis of CAMKII beta in A) human, B) mouse and C) rat brain lysate using CAMKII beta antibody at 1:2000.