Anti-Phospho-CaMKII alpha/beta (Thr286) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R016056

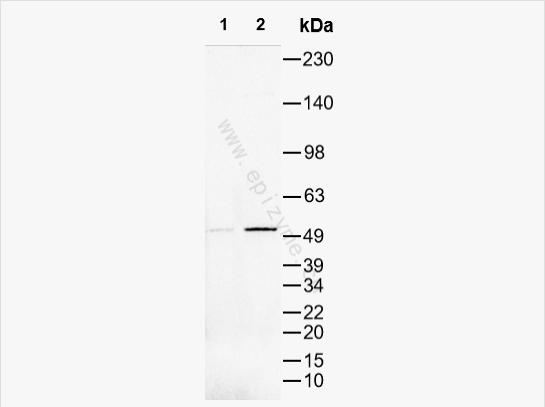
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	99T85E37
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Thr286 of human CaMKII alpha/beta
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-CaMKII alpha/beta (Thr286) Rabbit mAb [99T85E37] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	CAMKA; CaMKIINalpha; CaMKIIalpha; MRD53; MRT63; CAM2; CAMK2; CAMKB; CaMKIIbeta; MRD54; CAMKD; CAMK; CAMK-II; CAMKG; MRD59; 2810011D23Rik; 8030469K03Rik; CaMK II; [d]-CaMKII; CaMKII; mKIAA0968; Ck2b; CAMK1; Camki; RATCAMKI; PK2CDD; PKCCD; KCC2D_BOVIN; CAMK2D; CaM kinase II subunit delta; CaMK-II subunit delta; 2.7.11.17; KCC2B_BOVIN; CAMK2B; CaM kinase II subunit beta; CaMK-II subunit beta; KCC2B_HUMAN; KCC2G_HUMAN; CAMK2G; CaM kinase II subunit gamma; CaMK-II subunit gamma; KCC2D_HUMAN; KCC2A_HUMAN; CAMK2A; CaM kinase II subunit alpha; CaMK-II subunit alpha; KIAA0968; KCC2A_MOUSE; KCC2B_MOUSE; KCC2D_MOUSE; Kiaa4163; KCC2G_MOUSE; KCC2B_RAT; KCC2A_RAT; KCC2G_RAT; KCC2D_RAT.
Calculated MW	Calculated MW: 54 kDa; Observed MW: 54 kDa
Uniprot ID	Q13554
Gene ID	815
Background	The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this gene is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its calcium-calmodulin (CaM)-dependent activity, this protein can undergo autophosphorylation, resulting in CaM-independent activity. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Nov 2008]
Cellular Location	Synapse Postsynaptic density Cell projection Dendritic spine Cell projection Dendrite Postsynaptic lipid rafts.

Validation Images



Western Blot - Anti-Phospho-CaMKII alpha/beta (Thr286) Rabbit mAb [99T85E37]
All lanes: R016056 at 1:2,000 dilution
Lane 1: Untreated Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 2: Raw264.7 treated with 10nM insulin for 15min
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 54 kDa
Observed band size: 54 kDa
Developed using the ECL technique (Cat. No. SQ201).