



Datasheet for ABIN7138827
anti-CAMK2D antibody (pThr287)



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1 Image

Overview

Quantity:	100 µL
Target:	CAMK2D
Binding Specificity:	pThr287
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CAMK2D antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Peptide sequence around phosphorylation site of Threonine 287(Q-E-T(p)-V-E) derived from Human CaMK2- beta/ gamma/ delta.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using

Target Details

Target:	CAMK2D
Alternative Name:	CAMK2B/CAMK2G/CAMK2D (CAMK2D Products)

Target Details

Background: Background: Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca²⁺/calmodulin-binding and autophosphorylation, and is involved in dendritic spine and synapse formation, neuronal plasticity and regulation of sarcoplasmic reticulum Ca²⁺ transport in skeletal muscle. In neurons, plays an essential structural role in the reorganization of the actin cytoskeleton during plasticity by binding and bundling actin filaments in a kinase-independent manner. This structural function is required for correct targeting of CaMK2A, which acts downstream of NMDAR to promote dendritic spine and synapse formation and maintain synaptic plasticity which enables long-term potentiation (LTP) and hippocampus-dependent learning. In developing hippocampal neurons, promotes arborization of the dendritic tree and in mature neurons, promotes dendritic remodeling. Participates in the modulation of skeletal muscle function in response to exercise. In slow-twitch muscles, is involved in regulation of sarcoplasmic reticulum (SR) Ca²⁺ transport and in fast-twitch muscle participates in the control of Ca²⁺ release from the SR through phosphorylation of triadin, a ryanodine receptor-coupling factor, and phospholamban (PLN/PLB), an endogenous inhibitor of SERCA2A/ATP2A2.

Aliases: Calcium/calmodulin dependent protein kinase (CaM kinase) II beta antibody, Calcium/calmodulin dependent protein kinase II beta antibody, Calcium/calmodulin dependent protein kinase IIB antibody, Calcium/calmodulin dependent protein kinase type II beta chain antibody, calcium/calmodulin-dependent protein kinase II beta antibody, Calcium/calmodulin-dependent protein kinase type II subunit beta antibody, CAM 2 antibody, CaM kinase II beta chain antibody, CaM kinase II beta subunit antibody, CaM kinase II subunit beta antibody, CaM kinase II beta chain antibody, CAM2 antibody, CAMK 2 antibody, CAMK 2B antibody, CaMK II beta subunit antibody, CaMK II subunit beta antibody, CaMK-II subunit beta antibody, CAMK2 antibody, CaMK2 beta antibody, Camk2b antibody, CAMKB antibody, CaMKII beta subunit antibody, CaMKIIB antibody, KCC2B_HUMAN antibody, MGC29528 antibody, Proline rich calmodulin dependent protein kinase antibody, proline rich calmodulin-dependent protein kinase antibody

UniProt: [Q13554](#)

Pathways: [WNT Signaling](#), [Interferon-gamma Pathway](#), [Myometrial Relaxation and Contraction](#), [Smooth Muscle Cell Migration](#)

Application Details

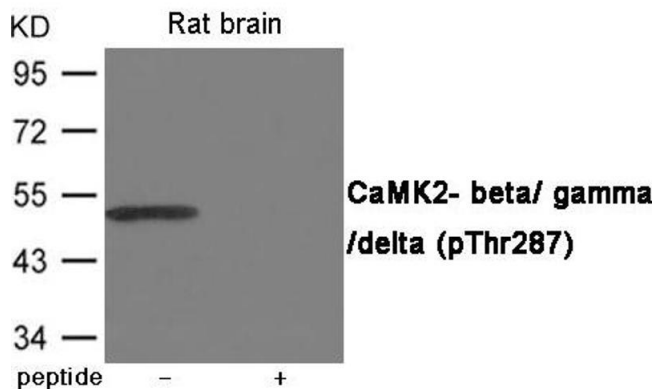
Application Notes: WB:1:500-1:1000,

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	Supplied at 1.0 mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Western Blotting

Image 1. Western blot analysis of extracts from Rat brain using CaMK2- beta/ gamma/ delta (Phospho-Thr287) Antibody. The lane on the right is treated with the antigen-specific peptide.