Datasheet for ABIN7146447

anti-CAMK2B antibody (AA 1-300)

2 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	CAMK2B
Binding Specificity:	AA 1-300
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CAMK2B antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human Calcium/calmodulin-dependent protein kinase type II subunit beta protein (1-300AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Antigen Affinity Purified

Target Details

Target:	CAMK2B
Alternative Name:	CAMK2B (CAMK2B Products)
Background:	Background: Calcium/calmodulin-dependent protein kinase that functions autonomously after

Target Details

	Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in dendritic spine and synapse formation, neuronal plasticity and regulation of sarcoplasmic reticulum Ca(2+) 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) Ca(2+) transport and in fast-twitch muscle participates in the control of Ca(2+) 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, Regulation of G-Protein Coupled Receptor Protein Signaling, Smooth Muscle Cell Migration, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Application Notes:	Recommended dilution: IHC:1:20-1:200,
Restrictions:	For Research Use only

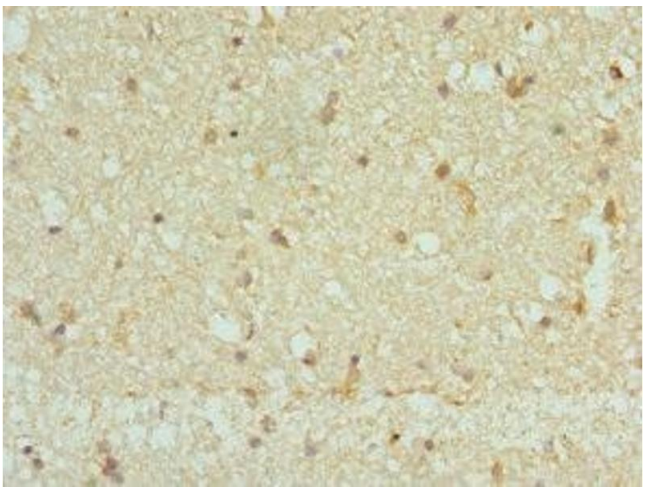
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
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

Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human skeletal muscle tissue using ABIN7146447 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human brain tissue using ABIN7146447 at dilution of 1:100