Datasheet for ABIN6244287

anti-CAMK2B antibody (AA 1-503)

2 Images

Go to Product page

Overview

Quantity:	200 µL
Target:	CAMK2B
Binding Specificity:	AA 1-503
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CAMK2B antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This CAMK2 beta antibody is generated from a mouse immunized with a recombinant protein between 1-503 amino acids from human CAMK2 beta.
Clone:	1050CT14-1-3
Isotype:	IgG1
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	CAMK2B
Alternative Name:	CAMK2 beta (CAMK2B Products)
Background:	Calcium/calmodulin-dependent protein kinase that functions autonomously after

Target Details

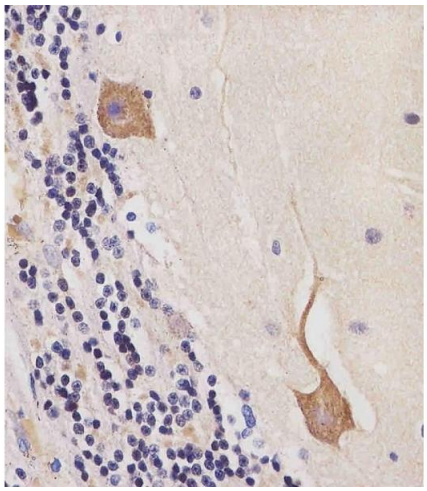
	Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in dendritic spine and synapse formation, neuronal plasticity and regulation of sarcoplasmic reticulum Ca(2+) transport in skeletal muscle. In neurons, plays an essential structural role in the reorganization of the actin cytoskeleton 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.
Molecular Weight:	72678
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:	WB: 1:2000. IHC-P: 1:25
Restrictions:	For Research Use only

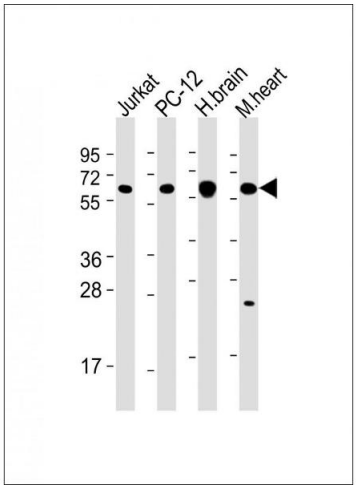
Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
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:	4 °C,-20 °C
Expiry Date:	6 months



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. (ABIN6244287 and ABIN6577245) staining CK2 in human cerebellum tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3 % BSA for 0. 5 hour at room temperature, antigen retrieval was by heat mediation with a citrate buffer (pH 6). Sples were incubated with primary antibody (1/25) for 1 hours at 37 °C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Western Blotting

Image 2. All lanes : Anti-CK2 beta Antibody (C-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: PC-12 whole cell lysate Lane 3: human brain lysate Lane 4: mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.