

Datasheet for ABIN7146449
anti-CAMK4 antibody (AA 304-473)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	CAMK4
Binding Specificity:	AA 304-473
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CAMK4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	Recombinant Human Calcium/calmodulin-dependent protein kinase type IV protein (304-473AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Antigen Affinity Purified

Target Details

Target:	CAMK4
Alternative Name:	CAMK4 (CAMK4 Products)
Background:	Background: Calcium/calmodulin-dependent protein kinase that operates in the calcium-

Target Details

triggered CaMKK-CaMK4 signaling cascade and regulates, mainly by phosphorylation, the activity of several transcription activators, such as CREB1, MEF2D, JUN and RORA, which play pivotal roles in immune response, inflammation, and memory consolidation. In the thymus, regulates the CD4+/CD8+ double positive thymocytes selection threshold during T-cell ontogeny. In CD4 memory T-cells, is required to link T-cell antigen receptor (TCR) signaling to the production of IL2, IFNG and IL4 (through the regulation of CREB and MEF2). Regulates the differentiation and survival phases of osteoclasts and dendritic cells (DCs). Mediates DCs survival by linking TLR4 and the regulation of temporal expression of BCL2. Phosphorylates the transcription activator CREB1 on '\Ser-133\' in hippocampal neuron nuclei and contribute to memory consolidation and long term potentiation (LTP) in the hippocampus. Can activate the MAP kinases MAPK1/ERK2, MAPK8/JNK1 and MAPK14/p38 and stimulate transcription through the phosphorylation of ELK1 and ATF2. Can also phosphorylate in vitro CREBBP, PRM2, MEF2A and STMN1/OP18.

Aliases: Brain Ca(2+) calmodulin dependent protein kinase type 4 antibody, Brain Ca(2+) calmodulin dependent protein kinase type IV antibody, Brain Ca++-calmodulin dependent protein kinase type IV antibody, Calcium / calmodulin dependent protein kinase type 4 catalytic chain antibody, Calcium / calmodulin dependent protein kinase type IV catalytic chain antibody, Calcium/calmodulin dependent protein kinase IV antibody, Calcium/calmodulin dependent protein kinase type IV antibody, Calcium/calmodulin-dependent protein kinase type IV antibody, CAM kinase 4 antibody, CAM kinase GR antibody, CAM kinase IV antibody, CAM kinase-GR antibody, CaMK 4 antibody, CAMK GR antibody, CaMK IV antibody, Camk4 antibody, CaMKGR antibody, IV antibody, KCC4_HUMAN antibody, MGC36771 antibody

UniProt: [Q16566](#)

Pathways: [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Production of Molecular Mediator of Immune Response](#), [G-protein mediated Events](#), [Interaction of EGFR with phospholipase C-gamma](#)

Application Details

Application Notes: Recommended dilution: WB:1:1000-1:5000, IP:1:200-1:2000,

Restrictions: For Research Use only

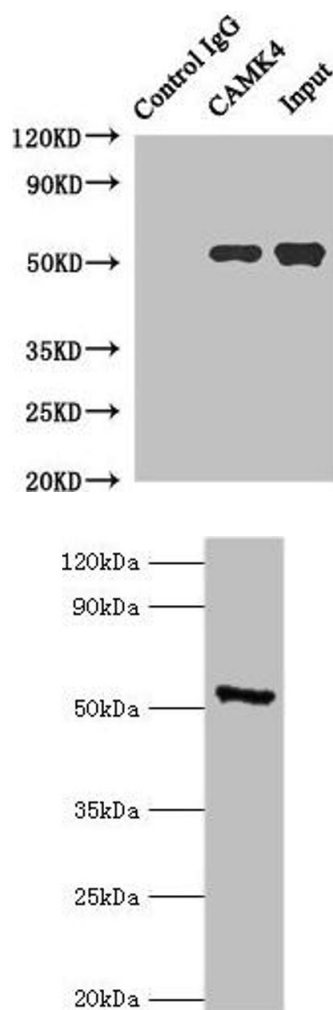
Handling

Format: Liquid

Handling

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



Western Blotting

Image 1. Immunoprecipitating CAMK4 in Jurkat whole cell lysate Lane 1: Rabbit control IgG instead of (1 µg) instead of ABIN7146449 in Jurkat whole cell lysate. For western blotting, a HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG was used as the Secondary antibody (1/50000) Lane 2: ABIN7146449 (4 µg) + Jurkat whole cell lysate (500 µg) Lane 3: Jurkat whole cell lysate (20 µg)

Western Blotting

Image 2. Western blot All lanes: CAMK4 antibody at 2 µg/mL + 293T whole cell lysate Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution Predicted band size: 52 kDa Observed band size: 52 kDa