Applications

WB,IHC,IF,ELISA



CaMKIIα/β/δ (Phospho Thr305) Rabbit pAb

CatalogNo: YP0279 Orthogonal Validated 💽

Key Features

Host Species Reactivity

Rabbit
 Human, Mouse, Rat

MW Isotype
• 54kD (Observed) • IgG

Recommended Dilution Ratios

WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:5000 IF 1:50-200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality Polyclonal

Immunogen Information

ImmunogenThe antiserum was produced against synthesized peptide derived from human CaMK2

alpha/beta/delta around the phosphorylation site of Thr305. AA range:271-320

Specificity

Phospho-CaMKII $\alpha/\beta/\delta$ (T305) Polyclonal Antibody detects endogenous levels of CaMKII $\alpha/\beta/\delta$ protein only when phosphorylated at T305.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):ILtTM

| Target Information

Gene name

CAMK2A

Protein Name

Calcium/calmodulin-dependent protein kinase type II subunit alpha

Organism	Gene ID	UniProt ID
Human	<u>815; 816; 817;</u>	Q9UQM7; Q13554; Q13557;
Mouse	<u>12322; 12323; 108058;</u>	
Rat	25400; 24245; 24246;	<u>P11275; P08413; P15791;</u>

Cellular Localization

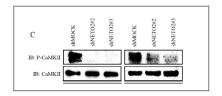
Cell junction, synapse. Cell junction, synapse, postsynaptic density. Cell projection, dendritic spine. Cell projection, dendrite. Postsynaptic lipid rafts..

Tissue specificity Brain,

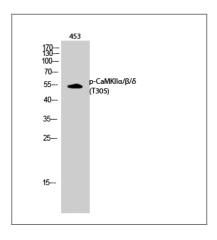
Function

Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Autophosphorylation of Thr-286 allows the kinase to switch from a calmodulin-dependent to a calmodulin-independent state.,Function:CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase family. CaMK subfamily.,similarity:Contains 1 protein kinase domain.,subcellular location:Postsynaptic lipid rafts.,subunit:CAMK2 is composed of four different chains: alpha, beta, gamma, and delta. The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. Interacts with BAALC, MPDZ, SYN1, CAMK2N2 and SYNGAP1.,

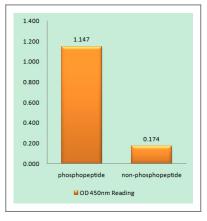
| Validation Data



NETO2 promotes melanoma progression via activation of the Ca2+/CaMKII signaling pathway Frontiers of Medicine Cong Peng WB Human SK-Mel-5 cell,SK-Mel-28 cell, WM35 cell



Western Blot analysis of 453 cells using Phospho-CaMKII $\alpha/\beta/\delta$ (T305) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CaMK2 alpha/beta/delta (Phospho-Thr305) Antibody

| Contact information

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Please scan the QR code to access additional product information:

CaMKIIα/β/δ
(Phospho Thr305)

Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents