Product Datasheet

CaMKII(Phospho-Thr286) Antibody

Catalog No: #11287

Package Size: #11287-1 50ul #11287-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

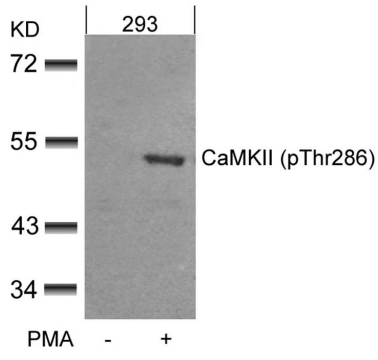
Product Name	CaMKII(Phospho-Thr286) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of CaMKII only when phosphorylated at threonine 286.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 286 (Q-E-T(p)-V-D) derived from Human CaMKII.
Target Name	CaMKII
Modification	Phospho
Other Names	CAMKA
Accession No.	Swiss-Prot: Q9UQM7NCBI Protein: NP_057065.2
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

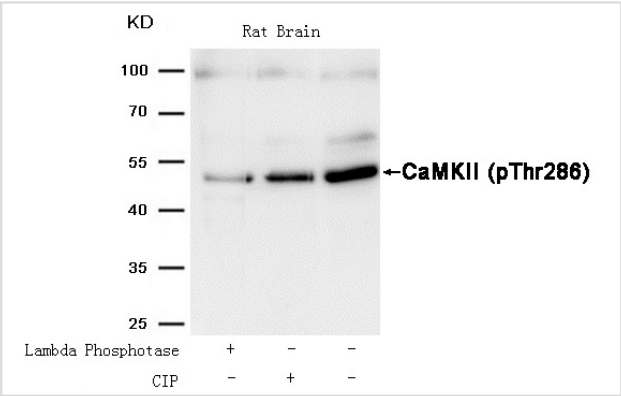
Predicted MW: 50kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from 293 cells untreated or treated with PMA using CaMKII(Phospho-Thr286) Antibody #11287.



Western blot analysis of extracts from Rat brain tissue treated with Lambda Phosphotase or calf intestinal phosphatase (CIP),using CaMKII (Phospho-Thr286) Antibody#11287.

Background

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

Pak JH, et al. Proc Natl Acad Sci U S A. 2000 Oct 10; 97(21): 11232-11237

Hudmon A, et al. J Cell Biol. Author manuscript; available in PMC 2006 May 7

Miller P, et al. PLoS Biol. 2005 Apr; 3(4): e107

Runyan JD, et al. Learn Mem. 2005 Mar; 12(2): 103-110.

Published Papers

el at., Roles of transient receptor potential channel 6 in glucose-induced cardiomyocyte injury. In World J Diabetes on 2022 Apr 15 by Shi-Jun Jiang,et al..PMID:35582666, , (2022)

PMID:35582666

el at., Cardiotoxicity of sorafenib is mediated through elevation of ROS level and CaMKII activity and dysregulation of calcium homoeostasis.In Basic Clin Pharmacol Toxicol on 2020 Feb; by Ma W, Liu M, et al..PMID:31483925, , (2020)

PMID:31483925

el at., Activation of M3 cholinoceptors attenuates vascular injury after ischaemia/reperfusion by inhibiting the Ca2+/calmodulinı ζ• ependent protein kinase II pathway.In Br J Pharmacol on 2015 Dec by Xing-Zhu Lu, Xue-Yuan Bi et al..PMID: 25953628, , (2015)

PMID:25953628

el at., Mechanisms underlying a decrease in KCl-induced contraction after long-term serum-free organ culture of rat isolated mesenteric artery.In J Vet Med Sci on 2014 Jul by Tomoka Morita, Muneyoshi Okada et al..PMID: 24694942, , (2014)

PMID:24694942

el at., HIV subtypes B and C gp120 and methamphetamine interaction: dopaminergic system implicates differential neuronal toxicity.In Sci Rep on 2015 Jun 9 by Thangavel Samikkannu, Kurapati V K Rao et al..PMID: 26057350, , (2014)

PMID:26057350

Note: This product is for in vitro research use only and is not intended for use in humans or animals.