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BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-CaMKII alpha/CAMK2A Antibody Picoband® Biotin Conjugated

Catalog Number: A03241-2-Biotin

About CAMK2A

Calcium/calmodulin-dependent protein kinase type II subunit alpha (CAMKIIalpha), a.k.a. Ca2+/calmodulin-dependent protein kinase II alpha, is a protein kinase (i.e., an enzyme which phosphorylates proteins) that in humans is encoded by the CAMK2A gene. It is mapped to 5q32. The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca (2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this gene is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its calcium-calmodulin (CaM)-dependent activity, this protein can undergo autophosphorylation, resulting in CaM-independent activity. Several transcript variants encoding distinct isoforms have been identified for this gene.

Overview

Product Name	Anti-CaMKII alpha/CAMK2A Antibody Picoband® Biotin Conjugated
Reactive Species	Human, Mouse, Rat
Clonality	Polyclonal
Formulation	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3.
Storage Instructions	At -20˚C for one year from date of receipt. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q9UQM7

Technical Details

Immunogen	E.coli-derived human CaMKII alpha/CAMK2A recombinant protein (Position: M1-H478).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5 mg/mL
Purification	Immunogen affinity purified.
Conjugate	Biotin
Suggested Dilutions	The intended application should be selected according to the customer's experimental requirements.

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3 Publications Citing This Product

1. PubMed ID: 10.3233/JAD-2012-120865, beta-Asarone Inhibits Neuronal Apoptosis via the CaMKII/CREB/Bcl-2 Signaling Pathway in an in vitro Model and AbetaPP/PS1 Mice

2. PubMed ID: -, Meng, X.,Fu, M.,Wang, S.,Chen, W.,Wang, J.,& Zhang, N.(2021). Naringin ameliorates memory deficits and exerts neuroprotective effects in a mouse model of Alzheimer's disease by regulating multiple metabolic pathways. Molecular Medicine Reports,23,332.https://doi.org/10.3892/mmr.2021.11971

3. PubMed ID: 32174475, Ma L,Chen X,Zhao B,Shi Y,Han F.Enhanced apoptosis and decreased ampa receptors are involved in deficit in fear memory in rin1 knockout rats.J Affect Disord.2020 May 1;268:173-182.doi:10.1016/j.jad.2020.02.040. Epub 2020 Feb 27.PMID:32174475.

Visit bosterbio.com/anti-camkii-alpha-camk2a-picoband-trade-antibody-a03241-2-boster.html to see all 3 publications.

Anti-CaMKII alpha/CAMK2A Antibody - Biotin

For Research Use Only. Not for use in diagnostic procedures.