



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Anti-CaMKII Antibody (PThr286)

Rabbit Anti-Human CaMKII (pThr286) Polyclonal
Catalog No. SPC-931



Discovery through partnership | Excellence through quality

Overview

Product Name

CaMKII Antibody (pThr286)

Description

Rabbit Anti-Human CaMKII (pThr286) Polyclonal

Species Reactivity

Human

Applications

WB, AM

Antibody Dilution

WB (1:250); optimal dilutions for assays should be determined by the user.

Host Species

Rabbit

Immunogen Species

Human

Immunogen

A phospho-specific peptide corresponding to residues surrounding Thr286 of human CaMKII (AA282-289)

Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

Properties

Storage Buffer

PBS pH7.4, 50% glycerol, 0.025% Thimerosal

Storage Temperature

-20°C

Shipping Temperature

Blue Ice or 4°C

Purification

Peptide Affinity Purified

Clonality

Polyclonal

Specificity

Detects 54.03 kDa.

Cite This Product

Rabbit Anti-Human CaMKII (pThr286) Polyclonal (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SPC-931)

Certificate Of Analysis

A 1:250 dilution of SPC-931 was sufficient for detection of CaMKII (pThr286) in 10 µg of rat brain lysate by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

Biological Description

Alternative Names

Calcium / calmodulin dependent protein kinase type II Antibody, CaM K2 Antibody, CaM kinase 2 alpha Antibody, CaM-KII Antibody, KCC2A_HUMAN Antibody, CAMK2B Antibody, CAMK2D Antibody, CAMK2G Antibody

Cellular Localization

Cell Junctions, Presynaptic Cell Membrane, Synapse

Accession Number

NP_741960

Gene ID

815

Swiss Prot

Q9UQM7

Scientific Background

CaMKII is an important member of calcium/calmodulin- activated protein kinase family, functioning in neural synaptic stimulation and T-cell receptor signaling (1, 2). CaMKII is expressed in many different tissues but is specifically found in the neurons of the forebrain and its mRNA is found within the dendrites and the soma of the neuron. The CaMKII that is found in the neurons consist of two subunits of 52 (termed alpha genes) and 60 kDa (beta genes). CaMKII has catalytic and regulatory domains, as well as an ATP-binding domain, and a consensus phosphorylation site (3-7). The binding of Ca²⁺ auto inhibitory effect and activates the kinase (8). /calmodulin to its regulatory domain releases its This kinase activation results in autophosphorylation at threonine 286 (8). The threonine phosphorylation state of CaMKII can be regulated through PP1/PKA. Whereas PP1 (protein phosphatase 1) dephosphorylates phospho-CaMKII at Thr286, PKA (protein kinase A) prevents this dephosphorylation (9). Autophosphorylation also enables CaMKII to attain an enhanced affinity for NMDA receptors in postsynaptic densities (10-12).

References

1. Hughes K. et al. (2001) J. Biol. Chem. 276: 36008-36013.
 2. Barria A. et al. (1997) Science 276: 2042-2045.
 3. Bennet M.K. and Kennedy M.B. (1987) Proc. Natl. Acad. Sci. U.S.A. 84: 1794-1798.
 4. Broke L., Srinivasan M. and Schulman H. (1995) J. Neurosci. 15: 6797-6808.
 5. Nghiem P., Saati S. M., Martens C. L., Gardner P. and Schulman H. (1993) J. Biol. Chem. 268: 5471-5479.
 6. Edman C.F. and Schulman H. (1994) Biochem. Biophys. Acta 1221: 90-102.
 7. Tombes R.M. and Krystal G.W., (1997) Biochem. Biophys. Acta 1355: 281-292.
 8. Means A.R. (2000) Mol. Endocrinol. 14: 412.
 9. Makhinson M. et al. (1999) J. Neurosci. 19: 2500-2510.
 10. Strack S. and Colbran R.J. (1998) J. Biol. Chem. 273: 20689-20692.
 11. Leonard S.A., Lim I.A., Hemsworth D.E., Horne M.C. and Hell J.W. (1999) Proc. Natl. Acad. Sci. U.S.A. 96: 3239-3244.
 12. Shen K. and Meyer Y. (1999) Science 284: 162-167.
 13. Shifman J. M., Choi M. H., Mihalas S, Mayo S. L., Kennedy M. B. 2006 Proc. Natl. Acad. Sci. U.S.A. 103: 13968-13973.
-

Product Images

Currently there are no images for this product

Product Citations (0)

Currently there are no citations for this product.

Reviews

There are no reviews yet.