



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## CAMK2A Pre-design Chimera RNAi

Catalog # : H00000815-R04

規格 : [ 10 nmol ] [ 20 nmol ]

List All

### Specification

**Product Description:** Homo sapiens calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha (CAMK2A), transcript variant 2, mRNA.

**Reactivity:** Human

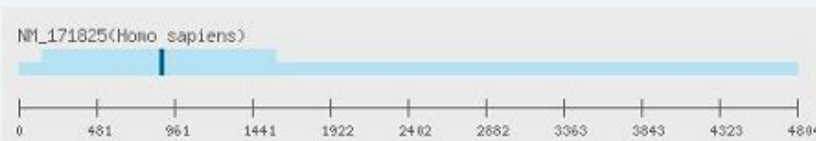
**Supplied Product:** DEPC water

**Target Refseq:** NM\_171825

**Target Region:** Coding sequence

**Storage Instruction:** Store at -20°C, do not exceed 4 - 5 freeze-thaw cycles to ensure product integrity.

**Note:** Position of the Chimera RNAi.  
The related RNAi products listed below were designed from different accession number but sharing the same RNAi sequence.



### Application Image

RNAi Knockdown

### Publication Reference

- [dsCheck: highly sensitive off-target search software for double-stranded RNA-mediated RNA interference.](#)  
Naito Y, Yamada T, Matsumiya T, Ui-Tei K, Saigo K, Morishita S. *Nucleic Acids Res.* 2005 Jul 1;33(Web Server issue):W589-91.
- [Functional dissection of siRNA sequence by systematic DNA substitution: modified siRNA with a DNA seed arm is a powerful tool for mammalian gene silencing with significantly reduced off-target effect.](#)  
Ui-Tei K, Naito Y, Zenno S, Nishi K, Yamato K, Takahashi F, Juni A, Saigo K. *Nucleic Acids Res.* 2008 Apr;36(7):2136-51. Epub 2008 Feb 11.
- [Guidelines for the selection of highly effective siRNA sequences for mammalian and chick RNA interference.](#)  
Ui-Tei K, Naito Y, Takahashi F, Haraguchi T, Ohki-Hamazaki H, Juni A, Ueda R, Saigo K. *Nucleic Acids Res.* 2004 Feb 9;32(3):936-48. Print 2004.
- [siDirect: highly effective, target-specific siRNA design software for mammalian RNA interference.](#)  
Naito Y, Yamada T, Ui-Tei K, Morishita S, Saigo K. *Nucleic Acids Res.* 2004 Jul 1;32(Web Server issue):W124-9.

### Applications

RNAi Knockdown

### Gene Information

Entrez GeneID: [815](#)

**Gene Name:** CAMK2A

**Gene Alias:** CAMKA,KIAA0968

**Gene Description:** calcium/calmodulin-dependent protein kinase II alpha

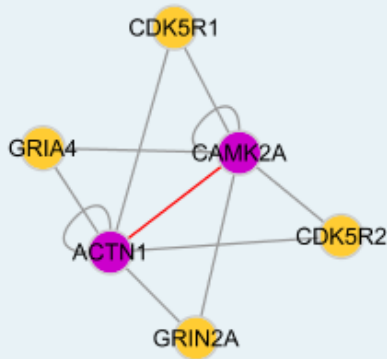
**Omim ID:** [114078](#)

**Gene Ontology:** [Hyperlink](#)

**Gene Summary:** 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. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq]

**Other Designations:** CaM kinase II alpha subunit,CaM-kinase II alpha chain,CaMK-II alpha subunit,CaMKIIalpha,OTTHUMP00000165787,OTTHUMP00000165788,calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha,calcium/calmodulin-dependent protein kinase II alpha-B subunit

### Interactome



### Gene Pathway

[Calcium signaling pathway](#) [ErbB signaling pathway](#) [Glioma](#) [GnRH signaling pathway](#) [Long-term potentiation](#) [Melanogenesis](#) [Neurotrophin signaling pathway](#) [Olfactory transduction](#) [Wnt signaling pathway](#)

### Related Disease

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