

## Rabbit CAMK2A (CAMK2 alpha) Polyclonal Antibody | anti-CAMK2A antibody

CAMK2A (CAMK2 alpha) Antibody (C-term)

|                               |                       |                                                               |                                                                  |
|-------------------------------|-----------------------|---------------------------------------------------------------|------------------------------------------------------------------|
| CATALOG #<br><b>AAA288823</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human (Predicted Reactivity: Mouse, Rat)</b> | APPLICATIONS<br><b>Immunohistochemistry, ELISA, Western Blot</b> |
|-------------------------------|-----------------------|---------------------------------------------------------------|------------------------------------------------------------------|

### PRODUCT SYNONYMS

CAMK2A (CAMK2 alpha); Polyclonal Antibody; CAMK2A (CAMK2 alpha) Antibody (C-term); Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2A; CAMKA; KIAA0968; anti-CAMK2A antibody

### PRODUCT SPECIFICATIONS

|                                                  |                                                                                                                                                                                                      |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                                                                                               |
| Reactivity                                       | Human (Predicted Reactivity: Mouse, Rat)                                                                                                                                                             |
| Clonality                                        | Polyclonal                                                                                                                                                                                           |
| Isotype                                          | Rabbit Ig                                                                                                                                                                                            |
| Specificity                                      | This CAMK2A (CAMK2 alpha) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 446-478 amino acids from the C-terminal region of human CAMK2A (CAMK2 alpha). |
| Purity/Purification                              | Purified Rabbit Polyclonal Antibody (Pab)                                                                                                                                                            |
| Form/Format                                      | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.            |
| Concentration                                    | Vial Concentration: 1.3 (varies by lot)                                                                                                                                                              |
| Sequence Positions                               | 446-478                                                                                                                                                                                              |
| Sequence Length                                  | 478                                                                                                                                                                                                  |
| Applicable Applications for anti-CAMK2A antibody | IHC (Immunohistochemistry), ELISA, WB (Western Blot)                                                                                                                                                 |
| Antigen Type                                     | Synthetic Peptide                                                                                                                                                                                    |
| Antigen Source                                   | HUMAN                                                                                                                                                                                                |
| Preparation and Storage                          | Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.                                               |

### IMAGES



#### IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human brain tissue reacted with CAMK2 alpha Antibody (C-term) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



#### IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



**WB (Western Blot)**

Western blot analysis of anti-CAMK2 alpha C-term Pab in 293 cell lysate. CAMK2 alpha (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

**ADDITIONAL INFORMATION**

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-CAMK2A antibody</b> | CaM-kinase II (CAMK2) is a prominent Ser/Thr protein kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Likely autophosphorylation of Thr-286 allows the kinase to switch from a calmodulin-dependent to a calmodulin-independent state. 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.                                              |
| <b>Product Categories/Family for anti-CAMK2A antibody</b>   | <a href="#">Cancer</a> ; <a href="#">Cardiovascular</a> ; <a href="#">Metabolism</a> ; <a href="#">Neuroscience</a> ; <a href="#">Signal transduction</a>                                                                                                                                                                                                                                                                                                                                                                             |
| <b>References</b>                                           | Blume-Jensen P, et al. Nature 2001. 411: 355.<br>Cantrell D, J. Cell Sci. 2001. 114: 1439.<br>Jhiang S Oncogene 2000. 19: 5590.<br>Manning G, et al. Science 2002. 298: 1912.<br>Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.<br>Robertson, S. et al. Trends Genet. 2000. 16: 368.<br>Robinson D, et al. Oncogene 2000. 19: 5548.<br>Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889.<br>Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561.<br>Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271. |

**NCBI AND UNIPROT INFORMATION**

|                                         |                                                                                                   |
|-----------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>NCBI GI #</b>                        | <a href="#">25952118</a>                                                                          |
| <b>NCBI GeneID</b>                      | <a href="#">815</a>                                                                               |
| <b>NCBI Accession #</b>                 | <a href="#">NP_741960.1</a>                                                                       |
| <b>NCBI GenBank Nucleotide #</b>        | <a href="#">NM_171825.2</a>                                                                       |
| <b>UniProt Accession #</b>              | <a href="#">Q9UQM7</a> ; <a href="#">Q9UL21</a> ; <a href="#">Q9Y2H4</a> ; <a href="#">Q9Y352</a> |
| <b>Molecular Weight</b>                 | 54088                                                                                             |
| <b>NCBI Official Full Name</b>          | calcium/calmodulin-dependent protein kinase type II subunit alpha isoform 2                       |
| <b>NCBI Official Synonym Full Names</b> | calcium/calmodulin-dependent protein kinase II alpha                                              |
| <b>NCBI Official Symbol</b>             | CAMK2A                                                                                            |
| <b>NCBI Official Synonym Symbols</b>    | CAMKA                                                                                             |
| <b>NCBI Protein Information</b>         | calcium/calmodulin-dependent protein kinase type II subunit alpha                                 |
| <b>UniProt Protein Name</b>             | Calcium/calmodulin-dependent protein kinase type II subunit alpha                                 |
| <b>UniProt Gene Name</b>                | <b>CAMK2A</b>                                                                                     |
| <b>UniProt Synonym Gene Names</b>       | CAMKA; KIAA0968; CaM kinase II subunit alpha; CaMK-II subunit alpha                               |
| <b>UniProt Entry Name</b>               | KCC2A_HUMAN                                                                                       |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

