

## Anti-CAMK4

Rabbit Polyclonal Antibody

Catalog # C15-63R

Lot # B3216-26

### Cited Applications

ELISA, WB

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the human CaM Kinase IV protein

### Cross Reactivity

Human, Mouse, Rat, Dog, Bovine, Chimpanzee

### Host/Isotype/Clone#

Rabbit, Antiserum

### Immunogen

The antibody was produced against synthesized peptide corresponding to amino acids 305-323 of Human CaM Kinase IV protein.

### Formulation

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

### Stability

1yr at -20°C from date of shipment

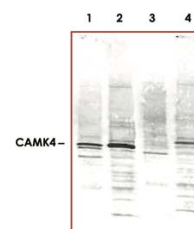
### Scientific Background

CAMK4 is a multifunctional serine/threonine protein kinase and a member of Ca(2+)/calmodulin-dependent protein kinase family. CAMK4 is localized in neurons in the hippocampus, amygdala, anterior cingulate cortex, somatosensory cortex, and insular cortex (1). CAMK4 is involved in neural activity-dependent signaling in the neuronal nucleus and thought to play an important role in the consolidation/retention of hippocampus-dependent long-term memory (2).

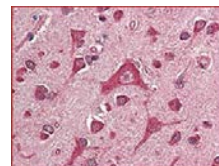
### References:

1. Sikela, J. M. et al: Chromosomal localization of the human gene for brain Ca(2+)/calmodulin-dependent protein kinase type IV. Genomics 4: 21-27, 1989.
2. Kang, H. et al: An important role of neural activity-dependent CaMKIV signaling in the consolidation of long-term memory. Cell 106: 771-783, 2001.

### Sample Data



Western blot using Anti-CAMK4 (1:1,000) shows detection of a band ~52 kDa corresponding to CaM Kinase IV (arrowhead) in various preparations: lane 1 - rat brain lysate, lane 2 - Jurkat cell lysate. Specific reactivity is blocked in both lysates when antibody is preincubated with immunizing peptide (lanes 3 and 4 respectively). Approximately 35 µg of each lysate was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose. CaM Kinase IV was similarly detected on lysates from mouse brain (not shown).



Anti-CAMK4 antibody was diluted 1:500 to detect CAMK4 in human brain cortex tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

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Purification

Delipidation, defibrination, buffering and clarification.

Stability

1yr at -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

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