

## Anti-CAMK2

Rabbit Polyclonal Antibody

Catalog # **C11-63R**

Lot # **B3216-25**

### Cited Applications

ELISA, WB

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

### Specificity

Recognizes the human CaM Kinase II Protein

### Cross Reactivity

Human, Mouse, Rat, Dog and Orangutan

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

The antibody was produced against synthesized peptide corresponding to amino acids 6-23 of Human CaM Kinase II 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

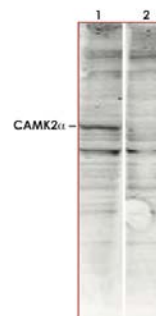
### Scientific Background

CaM Kinase II (also known as CAMK2 and calcium/calmodulin-dependent protein kinase type II alpha chain) is a prominent kinase in the central nervous system that may function in the long-term potentiation of neurotransmitter release. CaM Kinase II autophosphorylates itself at Thr-286 which allows the kinase to switch from a calmodulin-dependent to a calmodulin-independent state. CaM Kinase II 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. This kinase is expressed in brain tissue. Alternative splicing occurs for this gene product.

### References:

1. Lin, C.R., et al.: Molecular cloning of a brain-specific calcium/calmodulin-dependent protein kinase. Proc. Natl. Acad. Sci. U.S.A. 1987; 84 (16): 5962-5966.
2. Balleit, R.F., et al.: Conserved and variable regions in the subunits of brain type II Ca<sup>2+</sup>/calmodulin-dependent protein kinase. Neuron 1. 1988; (1): 63-72.
3. Hanley, R.M., et al.: Functional analysis of a complementary DNA for the 50-kilodalton subunit of calmodulin kinase II. Science. 1987; 237 (4812): 293-297.

### Sample Data



Western blot using Anti-CAMK2 (1:1,500) shows detection of a band ~54 kDa corresponding to human alpha CaM Kinase II. Specific reactivity with this band is blocked when the antibody is pre-incubated with the immunizing peptide (lane 2).

## Anti-CAMK2

Mouse Monoclonal Antibody

Catalog #	C11-63R
Lot #	B3216-25
Purification	Affinity chromatography
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.

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