

## Calmodulin-Dependent Protein Kinase II (CaMKII) Polyclonal Antibody

### ORDERING INFORMATION

**Catalog nos.:** 56370-50 (50ug) 56370-200 (200ug)

**Format:** Protein A-purified antibody in PBS, 50% glycerol, 0.09% sodium azide.

### BACKGROUND

Calmodulin-dependent protein kinase II (CaMKII) is a serine/threonine-specific protein kinase that is regulated by the Ca<sup>2+</sup>/calmodulin complex. CaMKII is involved in many signaling cascades and is thought to be an important mediator of learning and memory. CaMKII is also necessary for Ca<sup>2+</sup> homeostasis and reuptake in cardiomyocytes, chloride transport in epithelia, positive T-cell selection, and CD8 T-cell activation. CaMKII has 28 different isoforms that derive from the alpha, beta, gamma, and delta genes. Misregulation of CaMKII is linked to Alzheimer's disease, Angelman syndrome, and heart arrhythmia.

### SPECIFICATION SUMMARY

**Antigen:** Synthetic peptide corresponding to aa 7-20 (N-terminus) of rat CaMKII delta isoform conjugated to KLH.

**Accession no.:** P15791

**Gene ID:** 25246

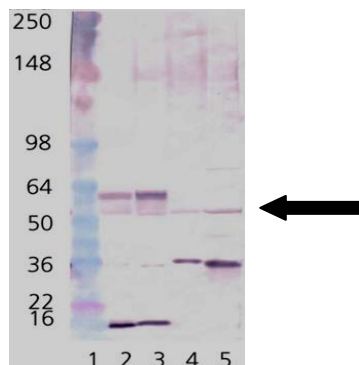
**Host Species:** Rabbit

**Antibody Class:** Polyclonal

**Specificity:** This antibody recognizes alpha, delta, and gamma isoforms of human, mouse, rat, bovine, hamster, guinea pig, chicken, and rabbit CaMKII.

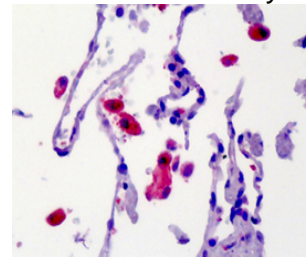
### APPLICATIONS

**Immunoblotting:** Use at 1-5ug/ml. A band of ~50-60 kDa is detected.



Detection of CaMKII in mouse brain extract (Lane 2), rat brain extract (Lane 3), HeLa cell lysate (Lane 4), Hs-67 cell lysate (Lane 5).

**Immunohistochemistry:** use at 1-10ug/ml.



Detection of CaMKII in human lung.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store in appropriate aliquots to avoid multiple freeze-thaw cycles.

*For in vitro investigational use only. Not intended for therapeutic or diagnostic procedures.*