

## Recombinant Phospho-CaMKII $\alpha$ , $\beta$ (Thr286) Monoclonal Antibody

catalog number: AN301143L

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

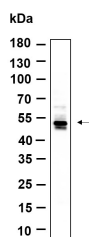
|                     |                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>   | Human;Mouse;Rat                                                                                          |
| <b>Immunogen</b>    | A synthetic peptide corresponding to residues around (Thr286) of Human Phospho-CaMKII $\alpha$ , $\beta$ |
| <b>Host</b>         | Rabbit                                                                                                   |
| <b>Isotype</b>      | IgG, $\kappa$                                                                                            |
| <b>Clone</b>        | C170766                                                                                                  |
| <b>Purification</b> | Protein A                                                                                                |
| <b>Buffer</b>       | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.                                          |

### Applications

### Recommended Dilution

|              |                |
|--------------|----------------|
| <b>WB</b>    | 1:2000-1:10000 |
| <b>IF</b>    | 1:200-1:1000   |
| <b>ELISA</b> | 1:5000-1:20000 |

### Data



Western Blot with Recombinant Phospho-CaMKII  $\alpha$ ,  $\beta$   
(Thr286) Monoclonal Antibody at dilution of 1:1000  
dilution. Lane A: NIH-3T3.

**Observed-MW:54 kDa**

**Calculated-MW:54 kDa**

### Preparation & Storage

|                 |                                                                 |
|-----------------|-----------------------------------------------------------------|
| <b>Storage</b>  | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| <b>Shipping</b> | Ice bag                                                         |

### Background

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.

### For Research Use Only

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