# Anti-CaMK II alpha Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P103779

## Product Information

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|---|---|
| Application | WB, IF (Cell)/ICC, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:500~1:1,000; IF 1:50~1:200 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthetic peptide corresponding to a sequence within amino acids 300-400 of human CAMK2A (NP_741960.1). |
| Format | Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-CaMK II alpha Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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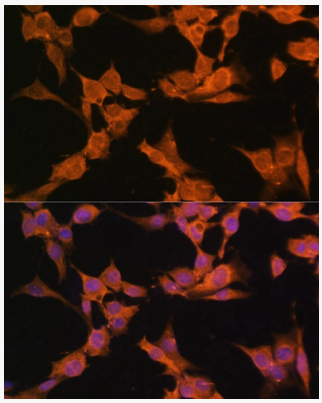
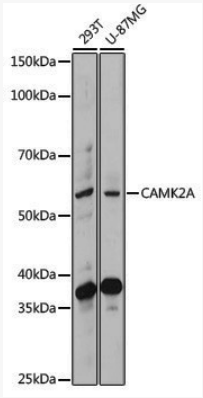
|---|---|
| Synonyms | CAMKA; MRD53; MRT63; CaMKIIalpha; CaMKIINalpha; CAMK2A. |
| Calculated MW | Calculated MW: 54 kDa; Observed MW: 54 kDa |
| Uniprot ID | Q9UQM7 |
| Gene ID | 815 |
| Background | The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent 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. Several transcript variants encoding distinct isoforms have been identified for this gene. |

## Validation Images



Immunofluorescence analysis of NIH/3T3 cells using CAMK2A Rabbit pAb (P103779) at dilution of 1:100. Blue: DAPI for nuclear staining.




Western blot analysis of various lysates using CAMK2A Rabbit pAb (P103779) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.