

## Product datasheet for **AP02774PU-N**

### **CAMK2A Rabbit Polyclonal Antibody**

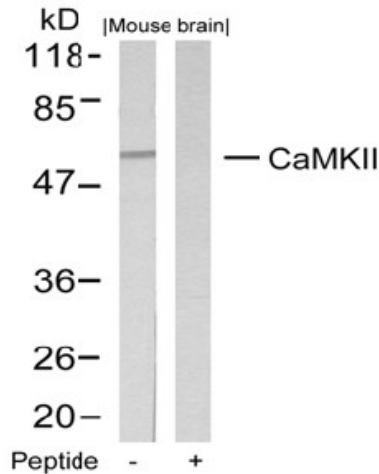
#### **Product data:**

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500 - 1/1000. <b>Immunofluorescence:</b> 1/100 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from human CaMKII around the phosphorylation site of Threonine 286 (Q-E-T $\rho$ -V-D).
Specificity:	This antibody detects endogenous levels of total CaMKII protein.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4 containing 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	calcium/calmodulin dependent protein kinase II alpha
Database Link:	<u><a href="#">Entrez Gene 12322 Mouse</a></u> <u><a href="#">Entrez Gene 25400 Rat</a></u> <u><a href="#">Entrez Gene 815 Human</a></u> <u><a href="#">Q9UQM7</a></u>

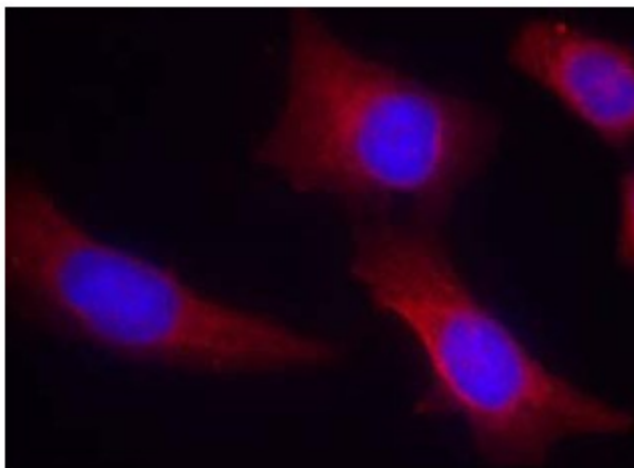


[View online »](#)

- Background:** CaMKII (Calcium/calmodulin-dependent protein kinase II) is a ubiquitous serine/threonine protein kinase that is abundant in the brain as a major constituent of the postsynaptic density (PSD). The enzyme is an oligomeric protein composed of distinct but related subunits, alpha, beta, gamma, and delta, each encoded by a separate gene. CAMK2A assembles into heterooligomeric complexes with other CAMK2 subunits. CaMKII is a prominent kinase in the central nervous system that may function in long term potentiation and neurotransmitter release.
- Synonyms:** CAMK2A, CAMK2B, CAMKA, KIAA0968, CaM-kinase II alpha chain, CaM kinase II subunit alpha, CaMK-II subunit alpha, CaM-kinase II beta chain, CaM kinase II subunit beta, CaMK-II subunit beta
- Protein Families:** Druggable Genome, Protein Kinase
- Protein Pathways:** Calcium signaling pathway, ErbB signaling pathway, Glioma, GnRH signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Wnt signaling pathway

**Product images:**

Western Blot analysis of extracts from mouse brain tissue using CaMKII antibody and the same antibody preincubated with blocking peptide



Immunofluorescence staining of paraffin-embedded human hippocampal region tissue from the falling sickness disease using CaMKII antibody