

Product datasheet for **AP20879PU-N**

CAMK2A pThr286 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human CaMKII α around the phosphorylation site of Threonine 286.
Specificity:	This antibody detects endogenous levels of p-CaMK2-a protein only when phosphorylated at Thr286.
Formulation:	Phosphate buffered saline (PBS), pH 7.2, 50% Glycerol State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.02% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 54 kDa
Gene Name:	calcium/calmodulin dependent protein kinase II alpha
Database Link:	Entrez Gene 815 Human Q9UQM7



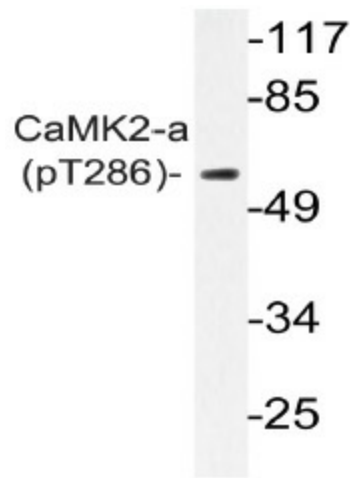
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Background:

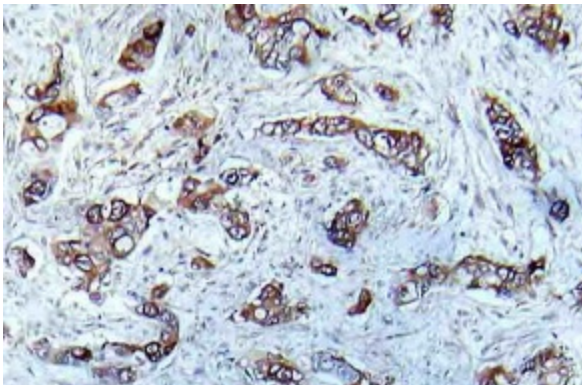
The Ca²⁺/calmodulin-dependent protein kinases (CaM kinases) comprise a structurally related subfamily of serine/threonine kinases which include CaMKI, CaMKII and CaMKIV. CaMKII is an ubiquitously expressed serine/threonine protein kinase that is activated by Ca²⁺ and calmodulin (CaM) and has been implicated in regulation of the cell cycle and transcription. There are four CaMKII isozymes, designated alpha, beta, gamma and delta, which may or may not be co-expressed in the same tissue type. CaMKIIalpha is autophosphorylated on Thr 286 upon the binding of the Ca²⁺/CaM complex to the autoinhibitory domain of CaMKII. This process is called Ca²⁺/CaM trapping, which is thought to be involved in the synaptic encoding of information.

Synonyms:

CAMKA, KIAA0968, CaM-kinase II alpha chain, CaM kinase II subunit alpha, CaMK-II subunit alpha

Product images:

Western blot (WB) analysis of p-CaMK2-a antibody in extracts from A431 EGF cells



Immunohistochemistry (IHC) analyzes of p-CaMK2-a antibody in paraffin-embedded human breast carcinoma tissue.