

Product datasheet for **AP06726PU-N**

CAMK2B (beta/gamma) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 601-652 of Human CaMKII β .
Specificity:	This antibody detects endogenous levels of CaMKII β / γ protein. (region surrounding Arg631)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction. Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 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:	~ 62 kDa
Gene Name:	calcium/calmodulin dependent protein kinase II beta
Database Link:	Entrez Gene 816 Human Q13554



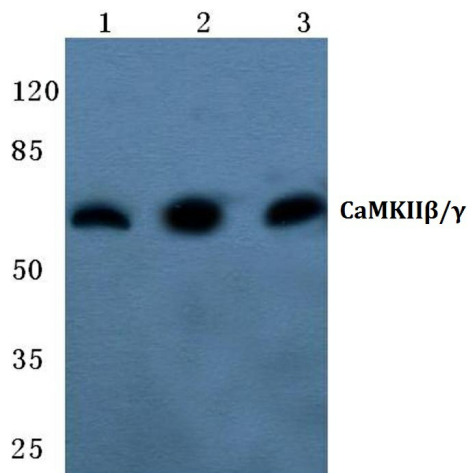
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Background:

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 α , β , γ and δ , which may or may not be coexpressed in the same tissue type. CaMKIV is stimulated by Ca²⁺ and CaM but also requires phosphorylation by a CaMK for full activation. Stimulation of the T cell receptor CD3 signaling complex with an anti-CD3 monoclonal antibody leads to a 10 - 40 - fold increase in CaMKIV activity. An additional kinase, CaMKK, functions to activate CaMKI through the specific phosphorylation of the regulatory threonine residue at position 177.

Synonyms:

CAM2, CAMKB, CaM-kinase II beta chain, CaM kinase II subunit beta, CaMK-II subunit beta, CAMKIIb

Product images:

Western blot (WB) analysis of CaMKII β/γ antibody at 1/500 dilution. Lane 1: HEK293T whole cell lysate; Lane 2: Raw264.7 whole cell lysate; Lane 3: Rat colon tissue lysate.