

Product datasheet for **TA302123**

PKC beta 1 (PRKCB) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:1000, IHC: 1:10~50
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This PKC beta2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 642-673 amino acids from the C-terminal region of human PKC beta2.
Formulation:	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Concentration:	lot specific
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	77011 Da
Gene Name:	protein kinase C beta
Database Link:	NP_002729 Entrez Gene 18751 Mouse Entrez Gene 25023 Rat Entrez Gene 701195 Monkey Entrez Gene 5579 Human



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Background:

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. PKC beta is one of the PKC family members. This protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress. Alternatively spliced transcript variants encoding distinct isoforms have been reported. Isoform 1 uses an alternate exon at the 3' end compared to isoform 2, which includes a part of the coding region. The resulting isoform 1 has a distinct and shorter C-terminus, as compared to isoform 2.

Synonyms:

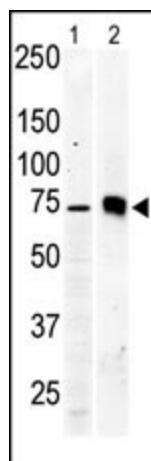
PKC-beta; PKCB; PRKCB1; PRKCB2

Protein Families:

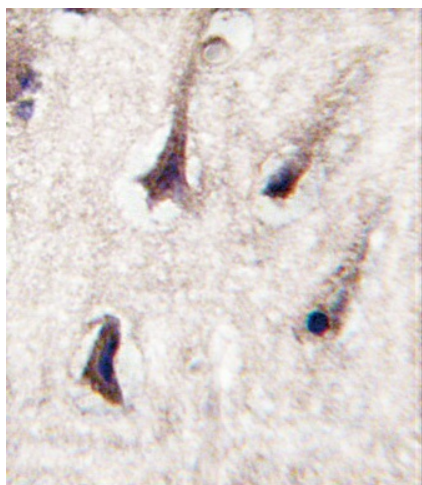
Druggable Genome, Protein Kinase

Protein Pathways:

B cell receptor signaling pathway, Calcium signaling pathway, Chemokine signaling pathway, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Leukocyte transendothelial migration, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, Tight junction, Vascular smooth muscle contraction, VEGF signaling pathway, Vibrio cholerae infection, Wnt signaling pathway

Product images:

The anti-PKC beta2 Pab (Cat. #TA302123) is used in Western blot to detect PKC beta2 in Jurkat cell lysate (lane 1) and mouse brain tissue lysate (lane 2).



Formalin-fixed and paraffin-embedded human brain tissue reacted with PKC beta2 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.