

PKC ζ rabbit pAb**Cat#: orb766101 (Manual)**

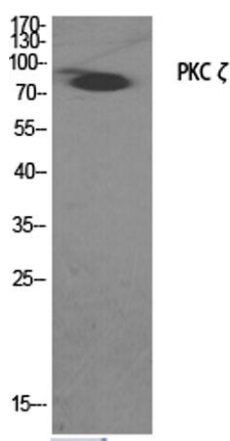
For research use only. Not intended for diagnostic use.

Product Name	PKC ζ rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat;Monkey
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human PKC zeta. AA range:526-575
Specificity	PKC ζ Polyclonal Antibody detects endogenous levels of PKC ζ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Protein kinase C zeta type
Gene Name	PRKCZ
Cellular localization	Cytoplasm . Endosome . Cell junction . Membrane ; Peripheral membrane protein . In the retina, localizes in the terminals of the rod bipolar cells (By similarity). Associates with endosomes (PubMed:9566925). Presence of KRIT1, CDH5 and RAP1B is required for its localization to the cell junction (PubMed:7597083). Colocalizes with VAMP2 and WDFY2 in intracellular vesicles (PubMed:17313651). Transiently translocates to the membrane of CA1 hippocampal cells in response to the induction of long term potentiation (By similarity). .; [Isoform 2]: Cytoplasm .

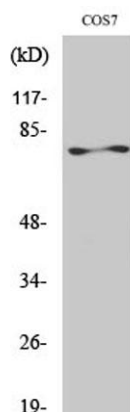
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	80kD
Human Gene ID	5590
Human Swiss-Prot Number	Q05513
Alternative Names	PRKCZ; PKC2; Protein kinase C zeta type; nPKC-zeta

Background

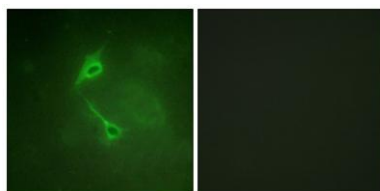
Protein kinase C (PKC) zeta is a member of the PKC family of serine/threonine kinases which are involved in a variety of cellular processes such as proliferation, differentiation and secretion. Unlike the classical PKC isoenzymes which are calcium-dependent, PKC zeta exhibits a kinase activity which is independent of calcium and diacylglycerol but not of phosphatidylserine. Furthermore, it is insensitive to typical PKC inhibitors and cannot be activated by phorbol ester. Unlike the classical PKC isoenzymes, it has only a single zinc finger module. These structural and biochemical properties indicate that the zeta subspecies is related to, but distinct from other isoenzymes of PKC. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008],



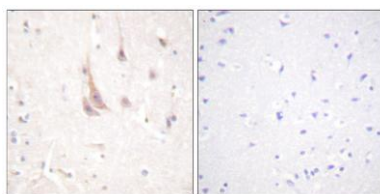
Western Blot analysis of various cells using PKC ζ Polyclonal Antibody diluted at 1:2000



Western Blot analysis of COS7 cells using PKC ζ Polyclonal Antibody diluted at 1:2000



Immunofluorescence analysis of NIH/3T3 cells, using PKC zeta Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PKC zeta Antibody. The picture on the right is blocked with the synthesized peptide.