Recombinant Full Length Human PRKCZ, His-tagged

Cat. No. PRKCZ-4811H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Protein Kinase C Zeta type/PRKCZ is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Met1-Val592) of Human PRKCZ fused with a polyhistidine tag at the C-terminus.
Species	Human
Source	HEK293
ProteinLength	1-592 a.a.
Description	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.
AA Sequence	MPSRTGPKMEGSGGRVRLKAHYGGDIFITSVDAATTFEELCEEVRDMCRLHQQHPL TLKW VDSE GDPCTVSSQMELEEAFRLARQCRDEGLIIHVFPSTPEQPGLPCPGED

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	KSIYRRGAR RWRKLYRA NGHLFQAKRFNRRAYCGQCSERIWGLARQGYRCINCK LLVHKRCHGLVPLTC RKHMDSVMPSQE PPVDDKNEDADLPSEETDGIAYISSSRKH DSIKDDSEDLKPVIDGMDGIKISQGLGLQDFDLIRV IGRGSYAKVLLVRLKKNDQIYA MKVVKKELVHDDEDIDWVQTE KHVFEQASSNPFLVGLHSCFQ TTSRLFLVIEYVNG GDLMFHMQRQRKLPEEHARFYAAEI CIALNFLHERGIIYRDLKLDNVL LDADGHIKLT DYGMCKEGLGPGDTTSTFCGTPNYIAP EILRGEEYGFSVDWWALGVLMFEMMAG RSPFDIITDNPDMNTEDYLFQVILEKPIRIPRF LSVKASHVLKGFLNKDPKERLGCRP QTGFSD IKSHAFFRSIDWDLLEKKQALPPFQPQIT DDYGLDNFDTQFTSEPVQLTPD DEDAIKRIDQSE FEGFEYINPLLLSTEESV
Endotoxin	Less than 0.1 ng/μg (1 IEU/μg).
Purity	Greater than 95% as determined by reducing SDS-PAGE.

GENE INFORMATION

Gene Name	PRKCZ protein kinase C, zeta [Homo sapiens (human)]
Official Symbol	PRKCZ
Synonyms	PRKCZ; protein kinase C, zeta; protein kinase C zeta type; PKC2; nPKC-zeta; PKC-ZETA; NP_001028753.1; EC 2.7.11.13; NP_001028754.1; NP_001229803.1; NP_002735.3
Gene ID	5590
mRNA Refseq	NM_001033581
Protein Refseq	NP_001028753
MIM	176982

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	Q05513
Chromosome Location	1p36.33-p36.2
Pathway	AGE/RAGE pathway; CDC42 signaling events; CXCR4-mediated signaling events
Function	14-3-3 protein binding; ATP binding; insulin receptor substrate binding; metal ion binding

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA