

Product datasheet for **SC323393**

PRKACG (NM_002732) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRKACG (NM_002732) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRKACG
Synonyms:	BDPLT19; KAPG; PKACg
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323393 sequence for NM_002732 edited (data generated by NextGen Sequencing)

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ATGGGCAACGCCCCGCCAAGAAGGACACCGAGCAGGAGAGCGTGAACGAGTTCCTA
GCCAAAGCCAGAGGAGATTTCTCTACAGATGGGGAAACCCCGCTCAAAACACCGCCAGC
TCGGATCAGTTCCGAACGGCTCAGGACGCTGGGCATGGGCTCCTTCGGGCGGGTGATGCTG
GTGAGGCACCAGGAGACCGCGGCCACTACGCCATGATGATCCTCAACAAGCAGAAGGTG
GTGAAGATGAAGCAGGTCGAGCACATACTGAACGAGAAGCGCATCCTGCAGGCGATCGAC
TTTCCGTTCTCGTCAAACCTCCAGTTCTCCTTTAAGGACAACCTACCTGTACCTGGTG
ATGGAGTACGTGCCGGTGGGGAGATGTTCTCCCGCTACAGCGCGTCGGAAGGTTTAGC
GAGCCCCATGCCTGTTTCTATGCCGCCAGGTCGTCTGGCCGTCAGTACCTACACTCG
CTCGACCTCATCCACCGGACCTGAAGCCCGAGAATCTCCTCATCGACCAGCAGGCTAC
CTGCAGGTGACGACTTCGGTTTTCGCCAAGCGCGTGAAGGGCCGCACTTGACCTTGTGC
GGGACCCAGAGTACCTGGCCCCGAGATCATCCTGAGCAAAGGCTACAACAAGGCCGTG
GACTGGTGGGCCCTAGGGGTGCTCATCTATGAGATGGCCGTGGGCTTCCCACCCTTCTAC
GCCGACCAGCCCATCCAGATCTACGAGAAGATCGTCTCTGGGAGGGTGGCGTTTCCCTCC
AAACTCAGCTCTGACCTCAAGCATCTGCTGCGGAGCCTGCTGCAGGTGGACCTACCAAG
CGCTTCGAAACCTCAGGAACGGGGTTGGCGACATCAAGAACCACAAGTGGTTCGCCACA
ACCAGCTGGATCGCCATCTATGAGAAGAAGGTGGAAGCTCCCTTCATCCCGAAGTACACA
GGCCCTGGGGATGCCAGTAACTTTGACGACTACGAGGAGGAAGAGCTCCGGATCTCCATC
AATGAGAAGTGTGCCAAGGAGTTTTCTGAGTTTTAG
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Clone variation with respect to NM_002732.3
218 a=>t;318 g=>a



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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_002732 unedited CCCCCGCGTTGAGCAATGGGCGGTAGGCGTGTACGGATGCGTGAGGTCTATATAAGCAGAGCTCGTTTAG TGAACCGTCAGAAATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGCCCCTGCCGCC GCCACCGCCATGGGCAACGCCCCCGCCAAGAAGGACACCGAGCAGGAGGAGAGCGTGAACGAGTTCCTAG CCAAAGCCAGAGGAGATTTCTCTACAGATGGGGAAACCCCGCTCAAAACACCGCCAGCTCGGATCAGTT CGAACGGCTCAGGACGCTGGGCATGGGCTCCTTCGGGCGGGTGAAGATGAAGCAGTCGAGCACATACTGACG GGCCACTACGCCATGATGATCCTCAACAAGCAGACGTGGTGAAGATGAAGCAGTCGAGCACATACTGACG AGAGCGCATCCTGCAGGCGATCGACTTTCCGTTCCCTCGTCAACTCCAGTTCTCCTTTAGGACACTCCTAC CTGTACCTGTGATGAGTACGTGCTGGTGGGAGATGTCTCCGCTACAGCGCGTCGAGGTTACGAGCCATGC TGTTTCATGCCCCAGTCGTCTGCGTCACTACTACATCGCTCGACCTATCACCGGGACTGGAGCCGAAATC TCTATCGACCACAGGCCTACCTGGAGGTGAACGGACTCGGTTTCCAGCCGTGAAGCCGACTTGGACCTT GGCGGAACAGATACCTGCCTGATATCTCTGACTAGGTCAACACGGGCTGACGTGACCATAGGGCTCTATT AGAATGCCTGCTTACCTACGCAACGCACATCTGAGATGTTCTGAGGACTGCGTTCTCACCTCTGATCAC TGAGCGCAATCTGAAGAGA
Kinase Domain Sequence:	>SC323393 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CSACGMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGCCCCTGCCGCCACCGCC ATGGGCAACGCCCCCGCCAAGAAGGACACCGAGCAGGAGGAGAGCGTGAACGAGTTCCTAGCCAAAGCCA GAGGAGATTTCTCTACAGATGGGGAAACCCCGCTCAAAACACCG
Restriction Sites:	Please inquire
ACCN:	NM_002732
Insert Size:	2100 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_002732.2 , NP_002723.2
RefSeq Size:	1560 bp

RefSeq ORF:	1056 bp
Locus ID:	5568
UniProt ID:	P22612
Cytogenetics:	9q21.11
Domains:	pkinase, S_TK_X, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Apoptosis, Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Hedgehog signaling pathway, Insulin signaling pathway, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Prion diseases, Progesterone-mediated oocyte maturation, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection, Wnt signaling pathway
Gene Summary:	Cyclic AMP-dependent protein kinase (PKA) consists of two catalytic subunits and a regulatory subunit dimer. This gene encodes the gamma form of its catalytic subunit. The gene is intronless and is thought to be a retrotransposon derived from the gene for the alpha form of the PKA catalytic subunit. [provided by RefSeq, Jul 2008]