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Product datasheet for SC323698

PKC mu (PRKD1) (NM_002742) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKC mu (PRKD1) (NM_002742) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKC mu
Synonyms:	CHDED; PKC-MU; PKCM; PKD; PRKCM
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC323698 sequence for NM_002742 edited (data generated by NextGen Sequencing)

ATGAGCGCCCCTCCGGTCCTGCGGCCGCCCAGTCCGCTGCTGCCCGTGGCGGCGGCAGCT
GCCGCAGCGGCCGCCGCACTGGTCCCAGGGTCCGGGCCCGGGCCCGCGCCGTTCTTGGCT
CCTGTCGCGGCCCCGGTCGGGGGCATCTCGTTCCATCTGCAGATCGGCCTGAGCCGTGAG
CCGGTGCTGCTGCTGCAGGACTCGTCCGGGGACTACAGCCTGGCGCACGTCCGCGAGATG
GCTTGCTCCATTGTCGACCAGAAGTTCCCTGAATGTGGTTTCTACGGAATGTATGATAAG
ATCCTGCTTTTTCGCCATGACCCTACCTCTGAAAACATCCTTCAGCTGGTGAAAGCGGCC
AGTGATATCCAGGAAGGCGATCTTATTGAAGTGGTCTTGTCAGCTTCCGCCACCTTTGAA
GACTTTCAGATTCGTCCCCACGCTCTCTTTGTTCATTCATACAGAGCTCCAGCTTTCTGT
GATCACTGTGGAGAAATGCTGTGGGGGCTGGTACGTCAAGGTCTTAAATGTGAAGGGTGT
GGTCTGAATTACCATAAGAGATGTGCATTTAAAATACCCAACAATTGCAGCGGTGTGAGG
CGGAGAAGGCTCTCAAACGTTTCCCTCACTGGGGTCAGCACCATCCGCACATCATCTGCT
GAACTCTCTACAAGTGCCCCTGATGAGCCCCTTCTGCAAAAATCACCATCAGAGTCGTTT
ATTGGTCGAGAGAAGAGGTCAAATTCTCAATCATACATTGGACGACCAATTCACCTTGAC
AAGATTTTGATGTCTAAAGTTAAAGTGCCGCACACATTTGTCATCCACTCCTACACCCGG
CCCACAGTGTGCCAGTACTGCAAGAAGCTTCTGAAGGGGCTTTTCAGGCAGGGCTTGCAG
TGCAAAGATTGCAGATTCAACTGCCATAAACGTTGTGCACCGAAAGTACCAAACAACTGC
CTTGGCGAAGTGACCATTAATGGAGATTTGCTTAGCCCTGGGGCAGAGTCTGATGTGGTC
ATGGAAGAAGGGAGTGATGACAATGATAGTGAAAGGAACAGTGGGCTCATGGATGATATG
GAAGAAGCAATGGTCCAAGATGCAGAGATGGCAATGGCAGAGTGCCAGAACGACAGTGGC
GAGATGCAAGATCCAGACCCAGACCACGAGGACGCCAACAGAACCATCAGTCCATCAACA
AGCAACAATATCCCACTCATGAGGGTAGTGCAGTCTGTCAAACACACGAAGAGGAAAAGC
AGCACAGTCATGAAAGAAGGATGGATGGTCCACTACACCAGCAAGGACACGCTGCGGAAA
CGGCACTATTGGAGATTGGATAGCAAATGTATTACCCTCTTTCAGAATGACACAGGAAGC
AGGTACTACAAGGAAATTCCTTTATCTGAAATTTTGTCTCTGGAACCAGTAAAAACTTCA
GCTTTAATTCCTAATGGGGCCAATCCTCATTGTTTCGAAATCACTACGGCAAATGTAGTG
TATTATGTGGGAGAAAATGTGGTCAATCCTTCCAGCCCATCACCAAATAACAGTGTTCTC
ACCAGTGGCGTTGGTGCAGATGTGGCCAGGATGTGGGAGATAGCCATCCAGCATGCCCTT
ATGCCCGTCATTCCCAAGGGCTCCTCCGTGGGTACAGGAACCAACTTGCACAGAGATATC
TCTGTGAGTATTTCAGTATCAAATTGCCAGATTCAAGAAAATGTGGACATCAGCACAGTA
TATCAGATTTTTCCTGATGAAGTACTGGGTTCTGGACAGTTTGGAATTGTTTATGGAGGA
AAACATCGTAAAACAGGAAGAGATGTAGCTATTAAAATCATTGACAAATTACGATTTCCA
ACAAAACAAGAAAGCCAGCTTCGTAATGAGGTTGCAATTCTACAGAACCTTCATCACCCT
GGTGTTGTAAATTTGGAGTGTATGTTTGAGACGCCTGAAAGAGTGTTTGTTGTTATGGAA
AAACTCCATGGAGACATGCTGGAAATGATCTTGTCAAGTGAAAAGGGCAGGTTGCCAGAG
CACATAACGAAGTTTTTAATTACTCAGATACTCGTGGCTTTGCGGCACCTTCATTTTAAA
AATATCGTTCACTGTGACCTCAAACCAGAAAATGTGTTGCTAGCCTCAGCTGATCCTTTT
CCTCAGGTGAAACTTTGTGATTTTGGTTTTGCCCGGATCATCGGAGAGAAGTCTTTCCGG
AGGTCAGTGGTGGGTACCCCCGCTTACCTGGCTCCTGAGGTCCTAAGGAACAAGGGCTAC
AATCGCTCTCTAGACATGTGGTCTGTTGGGGTCATCATCTATGTAAGCCTAAGCGGCACA
TTCCCATTTAATGAAGATGAAGACATACACGACCAAATTCAGAATGCAGCTTTCATGTAT
CCACCAAATCCCTGGAAGGAAATATCTCATGAAGCCATTGATCTTATCAACAATTTGCTG
CAAGTAAAAATGAGAAAGCGCTACAGTGTGGATAAGACCTTGAGCCACCCTTGGCTACAG
GACTATCAGACCTGGTTAGATTTGCGAGAGCTGGAATGCAAAATCGGGGAGCGCTACATC
ACCCATGAAAGTGATGACCTGAGGTGGGAGAAGTATGCAGGCGAGCAGGGGCTGCAGTAC
CCCACACACCTGATCAATCCAAGTGCTAGCCACAGTGACACTCCTGAGACTGAAGAAACA
GAAATGAAAGCCCTCGGTGAGCGTGTCAGCATCCTCTGA

Clone variation with respect to NM_002742.2
2202 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_002742 unedited
CCCGCCGTTGTGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGTCCGGAAAGTTTTTA
TTTTCCGTCTGGGCTCTCGGAGAAAGAAGCTCCTGGCTCAGCGGCTGCAAAACTTTCCTGCTGCCGCGCC
GCCAGCCCCCGCCCTCCGCTGCCCGGCCCTGCGCCCCGCCGAGCGATGAGCGCCCCTCCGGTCCTGCGGC
CGCCCAGTCCGCTGCTGCCCGTGGCGGCGGCAGCTGCCGCAGCGGCCGCCGCACTGGTCCCAGGGTCCCG
GGCCCCGGGCCCGCGCCGTTCTTGGCTCCTGTCGCGGCCCCGGTCGGGGGCATCTCGTTCATCCTGCAGA
TCCGGCCTGAGCCCGTGAGCCGTGCTGCTGCTGCAGGACTCGTCCGGGGACTACAGCCTGGCGCACGTCC
CCGGGATGCCTGGCTCCATTGTCGACCAGAAGTCCCTGATTGGGTTTCTACGGAAGGATGAATAAGGATC
CTGCTTTTTCGCCCTTGACCTACCTTTGAAACCTTCCTTAGCGGGTGAAGCGGGCCATGGATCCGGAAAG
GCAACTTATGAATGGGTTTGACTTCGCACCTTTGAAACTTTCATTCGCCCCCTCTTGGCTTACAACTCAC
TTCTGGATACTGGGAATGCTGAGCTGTCTCAAGCTAATGAAGGTGGCGAATCCTAAATGCTTAATCCACT
GCCCGTGGCGTAACGTTAAGGTCCATGTCGACACTTGCAATTCGCACTCAATTGCTTGAACTGGATCTAG
GCCATGGGCGAAAGTCACTCACATCAC

Kinase Domain Sequence:

>SC323698 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
GWCAGCMAGTATATCAGATTTTCCTGATGAAGTACTGGGTTCTGGACAGTTTGGAATTGTTTATGGAGGA
AAACATCGTAAAACAGGAAGAGATGTAGCTATTATGATCATTGACAAATTACGATTTCCAACAAAACAAG
AAAGCCAGCTTCGTAATGAGGTTGCAATTCTACAGAACCTTCATCACCCTGGTGTTGTAAATTTGGAGTG
TATGTTTGAGACGCCTGAAAGAGTGTTTGTTGTTATGGAAAAACT

Restriction Sites: Please inquire

ACCN: NM_002742

Insert Size: 3570 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:
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_002742.1, NP_002733.1

RefSeq Size:	3742 bp
RefSeq ORF:	2739 bp
Locus ID:	5587
UniProt ID:	Q15139
Cytogenetics:	14q12
Domains:	pkinase, TyrKc, PH, DAG_PE-bind, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	The protein encoded by this gene is a serine/threonine protein kinase involved in many cellular processes, including Golgi body membrane integrity and transport, cell migration and differentiation, MAPK8/JNK1 and Ras pathway signaling, MAPK1/3 (ERK1/2) pathway signaling, cell survival, and regulation of cell shape and adhesion. [provided by RefSeq, Jan 2017] Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region compared to variant 1. The encoded isoform (2) is shorter than isoform 2.