

Product datasheet for **SC323529**

GRK3 (NM_005160) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRK3 (NM_005160) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRK3
Synonyms:	ADRBK2; BARK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323529 sequence for NM_005160 edited (data generated by NextGen Sequencing)

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ATGGCGGACCTGGAGGCTGTGCTGGCCGATGTCAGTTACCTGATGGCCATGGAGAAGAGC
AAGGCGACCCCGGCCGCCCGCCAGCAAGAGGATCGTCCTGCCGGAGCCAGTATCCGG
AGTGTGATGCAGAAGTACCTTGCAGAGAGAAATGAAATAACCTTTGACAAGATTTTCAAT
CAGAAAAATTGGTTTCTTGCTATTTAAAGATTTTTGTTTGAATGAAATTAATGAAGCTGTA
CCTCAGTGAAGTTTTATGAAGAGATAAAGGAATATGAAAACTTGATAATGAGGAAGAC
CGCCTTTGCAGAAGTCGACAAATTTATGATGCCTACATCATGAAGGAACCTCTTTCTGT
TCACATCCTTTCTCAAAGCAAGCTGTAGAACACGTACAAAGTCATTTATCCAAGAAACAA
GTGACATCAACTCTTTTTCAGCCATACATAGAAGAAATTTGTGAAAGCCTTCGAGGTGAC
ATTTTTCAAAAATTTATGAAAAGTGACAAGTTCCTAGATTTTGTGAGTGGAAAAACGTT
GAATTAATATCCATTTGACCATGAATGAGTTCAGTGTGCATAGGATTATTGGACGAGGA
GGATTCGGGGAAGTTTATGGTTGCAGGAAAGCAGACACTGGAAAAATGTATGCAATGATG
TGCTTAGATAAGAAGAGGATCAAAATGAAACAAGGAGAAACATTAGCCTTAAATGAAAGA
ATCATGTTGTCTCTTGTGACACAGGAGACTGTCTTTTATTGTATGTATGACCTATGCC
TTCCATACCCAGATAAACTCTGCTTCATCCTGGATCTGATGAACGGGGGCGATTTCGAC
TACCACCTTTCAACACGGTGTGTTCTCTGAGAAGGAGATGCGGTTTTATGCCACTGAA
ATCATTCTGGGTCTGGAACACATGCACAATCGGTTTGTGCTACAGAGATTTGAAGCCA
GCAAAATTTCTCTTGGATGAACATGGACACGCAAGAATATCAGATCTTGGTCTTGCCCTGC
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GTGCTGCAGAAGGGGACGGCCTATGACAGCAGTCCGACTGGTTCTCCCTGGGCTGCATG
CTTTTCAAACCTTCTGAGAGGTCACAGCCCTTTGAGACAACATAAAACAAAGACAAGCAT
GAAATTTGACCGAATGACACTCACCGTGAATGTGGAACCTCCAGACACCTTCTCTCCTGAA
CTGAAGTCCCTTTTGGAGGGCTTGCTTCAGCGAGACGTTAGCAAGCGGCTGGGCTGTAC
GGAGGCGGCTCACAGGAAGTAAAAGAGCACAGTTTTTTCAAAGGTGTTGACTGGCAGCAT
GTCTACTTACAAAAGTACCCACCACCTTGATTCTCCCGGGGAGAAGTCAATGCTGCT
GATGCCTTTGATATTGGCTCATTTGATGAAGAGGATACCAAAGGGATTAAGCTACTTGAT
TGCGACCAAGAAGTCTACAAGAATCCCTTTGGTCATCTCTGAACGCTGGCAGCAAGAA
GTAACGGAAACAGTTTATGAAGCAGTAAATGCAGACACAGATAAAATCGAGGCCAGGAAG
AGAGCTAAAAATAAGCAACTTGCCACGAAGAAGATTACGCTCTGGGGAAGGACTGTATT
ATGCACGGGTACATGCTGAAACTGGGAAACCCATTTCTGACTCAGTGGCAGCGTCGCTAT
TTTTACCTCTTTCCAAATAGACTTGAATGGAGAGGAGAGGGAGAGTCCCGGCAAAATTTA
CTGACAATGGAACAGATTCTCTCTGTGGAAGAACTCAAATTAAGACAAAAAATGCATT
TTGTTTCAAAATAAAGGAGGAAACAATTTGTCTTGAATGTGAGAGTATCCAGAGTTT
GTGAGTGGAAAGAGATTGAACGAAACCTTCAAGGAGGCCAGCGGCTATTGCGTCGT
GCCCCGAAGTTCTCAACAAACCTCGGTCAGGTAAGTGTGGAGCTCCCAAAGCCATCCCTC
TGTACAGAAACAGCAACGGCCTCTAG

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Clone variation with respect to NM_005160.3
659 a=>t;660 a=>g

5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_005160 unedited CCCGCCGCTCTCAGCAAATGGGCGGTAGGCGCTGTACGGTTGGGAGGATCTATATAAGCAGAGCTCGTTT AGTTGAACCGTCAGAATCCTGTAATACGACTCACTATAGGGCGGCCGCGAATCCGGCACGAGGCCAAAGC TCGCCAACATGGCGGACCTGGAGGCCGTGCTGGCCGATGTCAGTAACCTGATGGCCATGGAGAAGAGCAA GGCGACCCCGGCCCGCCGCGCCAGCAAGAGGAACGTCCTGCCGGAGCCAGTATCCGGAGTGTGATGCAG AAGTACCTTGCAGAGAGAAATGAAATAACCTTTGACAAGATTTTCAATCAGAAAAATTGGTTTCTTGCTAT TTAAAGATTTTTGTTTGAATGAAATTAATGAAGCTGTACCTCAGGTGAAGTTTTATGAAGAGATAAAGGA ATATGAAAAAATTGATAATGAGGAAGACCGCCTTTCAGAAAGTCGACAAATTTATGATGCCTACATCATG AAGGAACTTCTTCTGTTTACATCCTTTCTCAAAGCAAGCTGTAGAACACGTACAAAGTCATTTATCCA AGAACAAGTGACATCAACTCTTTTTCAGCCATACATAGAAGAATTTGTGAAAGCCTTCGAGGTGACATTT TTCAAAAATTTATGAAAAGTGACAAGTTCACTAGATTTTGTGAGTGGAAAAACGTTGATTAATATCCAT TTGACCATGAATGAGTTCAGTGTGCATAGATTATTGGACGAGAGATCGGGGAAGTTATGGTTGCAGAAGC AAACCTGGAAAAATGTTATGCATGATGTGCTAGTAGAGAGGATCGATGAACAGGAAAACATAGCTATGAA GATCATGTTGCTCTGTCAGCCAGGAAGTCTTTCATGTAATGTATGACTATGCTTCTAACCGATTACTT GCTTCATCTGGATTTCGATGACCGGGCGATGCTACACCTCAACGGTGTCTCTGCAGAGAGATGCGGTT ATGCTG
Kinase Domain Sequence:	>SC323529 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 TYGTGTGCAWAGGWTATTGGACGAGGAGGATTCGGGGAAGTTTATGGTTGCAGGAAAGCAGACACTGGAA AAATGTATGCAATGATGTGCTTAGATAAGAAGAGGATCAAAATGAAACAAGGAGAAACATTAGCCTTAAA TGAAGAATCATGTTGTCTTGTGTCAGCACAGGAGACTGTCCTTTCATTGTATGTATGACCTATGCCTTC CATACCCAGATAAACTCTGCTTCATCCTGGATCTGATGAACGGG
Restriction Sites:	Please inquire
ACCN:	NM_005160
Insert Size:	3370 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
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_005160.2 , NP_005151.1
RefSeq Size:	3628 bp
RefSeq ORF:	2067 bp
Locus ID:	157
UniProt ID:	P35626
Cytogenetics:	22q12.1
Domains:	RGS, pkinase, S_TK_X, TyrKc, PH, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chemokine signaling pathway, Endocytosis, Olfactory transduction
Gene Summary:	The beta-adrenergic receptor kinase specifically phosphorylates the agonist-occupied form of the beta-adrenergic and related G protein-coupled receptors. Overall, the beta adrenergic receptor kinase 2 has 85% amino acid similarity with beta adrenergic receptor kinase 1, with the protein kinase catalytic domain having 95% similarity. These data suggest the existence of a family of receptor kinases which may serve broadly to regulate receptor function. [provided by RefSeq, Jul 2008]