

Product datasheet for **SC116917**

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:

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>OriGene ORF sequence for NM_005160 edited
ATGGCGGACCTGGAGGCTGTGCTGGCCGATGTCAGTTACCTGATGGCCATGGAGAAGAGC
AAGGCGACCCCGCCGCCCGCCGAGCAAGAGGATCGTCTGCCGGAGCCAGTATCCGG
AGTGTGATGCAGAAGTACCTTGCAGAGAGAAATGAAATAACCTTTGACAAGATTTTCAAT
CAGAAAATTGGTTTCTTGCTATTTAAAGATTTTGTGTTGAATGAAATTAATGAAGCTGTA
CCTCAGGTGAAGTTTTATGAAGAGATAAAGGAATATGAAAACTTGATAATGAGGAAGAC
CGCCTTTGCAGAAGTCGACAAATTTATGATGCCTACATCATGAAGGAACCTTTTCTGT
TCACATCCTTTCTCAAAGCAAGCTGTAGAACACGTACAAAGTCATTTATCCAAGAAACAA
GTGACATCAACTCTTTTTCAGCCATACATAGAAGAAATTTGTGAAAGCCTTCGAGGTGAC
ATTTTTCAAAAATTTATGGAAAGTGACAAGTTCCTAGATTTTGTGAGTGGAAAAACGTT
GAATTAATATCCATTTGACCATGAATGAGTTCAGTGTGCATAGGATTATTGGACGAGGA
GGATTCGGGGAAGTTTATGGTTGCAGGAAAGCAGACACTGGAAAAATGTATGCAATGAAA
TGCTTAGATAAGAAGAGGATCAAATGAAACAAGGAGAAACATTAGCCTTAAATGAAAGA
ATCATGTTGTCTTGTGACGACAGGAGACTGTCCTTTTATTGTATGTATGACCTATGCC
TTCCATACCCAGATAAACTCTGCTTCATCCTGGATCTGATGAACGGGGGCGATTGACAC
TACCACCTTTCACAACACGGTGTGTTCTCTGAGAAGGAGATGCGGTTTTATGCCACTGAA
ATCATTCTGGGTCTGGAACACATGCACAATCGGTTTTGTTGTCTACAGAGATTTGAAGCCA
GCAAAATTTCTCTTGGATGAACATGGACACGCAAGAATATCAGATCTTGGTCTTGCCCTGC
GATTTTTCAAAAAGAAGCCTCATGCGAGTGTGGCACCCATGGGTACATGGCTCCCGAG
GTGCTGCAGAAGGGGACGGCCTATGACAGCAGTCCGACTGGTTCTCCCTGGGCTGCATG
CTTTTCAAACCTTGAGAGGTCACAGCCCTTTAGACAAACATAAAACCAAGACAAGCAT
GAAATTGACCGAATGACACTCACCGTGAATGTGGAACCTCCAGACACCTTCTCTCCTGAA
CTGAAGTCCCTTTTGGAGGGCTTGCTTACGCGAGACGTTAGCAAGCGGCTGGGCTGTAC
GGAGGCGGCTCACAGGAAGTAAAAGAGCACAGCTTTTTCAAAGGTGTTGACTGGCAGCAT
GTCTACTTACAAAAGTACCCACCACCTTGATTCTCCCGGGGAGAAAGTCAATGCTGCT
GATGCCTTTGATATTGGCTCATTTGATGAAGAGGATACCAAAGGGATTAAGCTACTTGAT
TGCGACCAAGAAGTCTACAAGAATTCCTTTGGTCTCTCTGAACGCTGGCAGCAAGAA
GTAACGGAAACAGTTTATGAAGCAGTAAATGCAGACACAGATAAAATCGAGGCCAGGAAG
AGAGCTAAAAATAAGCAACTTGCCACGAAGAAGATTACGCTCTGGGGAAGGACTGTATT
ATGCACGGGTACATGCTGAAACTGGGAAACCCATTTCTGACTCAGTGGCAGCGTCGCTAT
TTTTACCTCTTTCAAATAGACTTGAATGGAGAGGAGAGGGAGAGTCCCGCAAAATTTA
CTGACAATGGAACAGATTCTCTGTGGAAGAACTCAAATTAAGACAAAAAATGCATT
TTGTTCCAGAATAAAAGGAGGGAACAATTTGTCTTGCAATGTGAGAGTGATCCAGAGTTT
GTGCAAGTGAAGAAAGAGTTGAACGAAACCTTCAAGGAGGCCAGCGGCTATTGCGTCGT
GCCCCGAAGTTCTCAACAAACCTCGGTCAAGTACTGTGGAGCTCCCAAAGCCATCCCTC
TGTACAGAAACAGCAACGGCCTCTAG
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_005160 unedited
AAATCTTGGATTTGTATACGACTTATATAGGCGGCCGCGCAATTCGCACGAGGCCAAAGC
TCGCCAACATGGCGGACCTGGAGGCTGTGCTGGCCGATGTCAGTTACCTGATGGCCATGG
AGAAGAGCAAGGCGACCCCGCCGCCAGCAAGAGGATCGTCCTGCCGGAGCCCA
GTATCCGGAGTGTGATGCAGAAGTACCTTGCAGAGAGAAATGAAATAACCTTTGACAAGA
TTTTCAATCAGAAAATTGGTTTCTTGTCTATTTAAAGATTTTGTGTTGAATGAAATTAATG
AAGCTGTACCTCAGGTGAAGTTTTATGAAGAGATAAAGGAATATGAAAACTTGATAATG
AGGAAGACCGCCTTTGCAGAAGTCGACAAATTTATGATGCCTACATCATGAAGGAACTTC
TTTCTGTTCCACATCCTTTCTCAAAGCAAGCTGTAGAACACGTACAAAAGTCATTTATCCA
AGAAACAAGTGACATCAACTCTTTTATAGCCATACATAGAAGAAATTTGTGAAAGCCTTC
GAGGTGACATTTTTCAAAAATTTATGGAAGTGACAAGTTCAGTATTTTGTGAGTGGG
AAAACGTTGAATTAATATCCATTTGACCATGAATGAGTTCAGTGTGCATAGGATTATTG
GACGAGGAGGATTCGGGGAAGTTTATGGTTGCAGGANAGCAGACACTGGAAAAATGTATG
CAATGAAATGCTTAGATAAGAAGAGGATCANAATGAAACAAGGAGAAACATTAGCCTTAA
ATGANAGAATCATGTTGTCTCTTGTGACACNAGAGACTGTCNCTTCATTGTATGTATGA
CCTATGCCTTNCATACCCAGATAACTCTGCTTCATCCTGGATCTGATGAACGGGGCGA
TTTGCCTACCACCTTTACACAN
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_005160 unedited
GCGGCACGCAATCTAGTATCGAGTTTTTTTTTTTTTTTTTTTTTAAAGACTGATGACATGGNGG
GATTTTCGCTGGTTCTCATAACCCAGCATCTATTTGGGGGTATCAGTGGGGCCTGGAGGCA
GTGGGAGAAAACAACTTACAGGGCAGATGCTGCTGGGACCAGGAAAAAGGCTTCATGC
CCTAAGGTCTCACTGTGCTACAGCCCAGTGCAAAGTATCATTTCATGACAGATGCA
TGACGACATGAAAGTCAATATACACAGTTAACCCATTTTACACATTCATTCTCAGCAT
TTTTTCAATACAATTCATCTGAAATTATACTAAGACATAAAACAGACCTGCTTTTGTACA
TCCATTACTGATATGTCTCCAGGGTCAGGCAGAAAGGAACCAGAAATGACTGTCACACAAC
TGCTAATTGTGCGAGACCTGAGACGGACTCACCCATGAGTGTCTGCTGATGCCAGGTAAGT
CTTGTGCGACTCGTGCACACTGGACTCAAAGACTTTTAAAACTGCTCTTGCCCTGAAAC
CTAAAACCTCCACGGCCTGTCTTCAGAATCACTGTAATCTTTCCAATGATGGACGGATG
AATGCCTTCAATGATTAGTTAATCCCATACACTTGGATAGTACGTGTCCTGATCCATCCAC
CTGGCTGAGGGGGCCCCGGAACAGACTGGTCAGAGGCAGGGCAGTCATGTGGGTGCGGCT
CCCAGAGGAGGCCAATGCAGAATATCTTCAACTTTAATATATCAGAAATATCTTCACTT
TAACCCAGACAAGAATAGTTGCGAGTGCCATAGTAACCACTGGGCTCTCCATCCCCAGC
AGTTGACCAAGACTANAATCACGTGACTGACGGATATGTGCATGCTTAGGCATCTGTAC
CCAATGACATCTTAAATTCCTGCGAGTCTAGAAGTGTGATTCAGACTAAN
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Restriction Sites:

NotI-NotI

ACCN:

NM_005160

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 TrueClone was found to represent an alternative form of the specific reference to which it is associated. Its Open Reading Frame (ORF) may represent a novel form or alternative splice variant. By virtue of it being a true transcript (cDNA clone not PCR product), it provides a biologically relevant copy of its mRNA template. For more details, please evaluate the sequence information provided on this website or contact our customer care specialists.

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_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]