

## Product datasheet for **SC119158**

### GRK2 (NM\_001619) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRK2 (NM_001619) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRK2
Synonyms:	ADRBK1; BARK1; BETA-ARK1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

## Fully Sequenced ORF:

```
>OriGene ORF sequence for NM_001619 edited
ATGGCGGACCTGGAGGCGGTGCTGGCCGACGTGAGCTACCTGATGGCCATGGAGAAGAGC
AAGGCCACGCCGGCCGCGCGCCAGCAAGAAGATACTGCTGCCCGAGCCAGCATCCGC
AGTGTCATGCAGAAGTACCTGGAGGACCGGGGCGAGGTGACCTTTGAGAAGATCTTTCC
CAGAAGCTGGGGTACCTGCTCTCCGAGACTTCTGCTGAACACCTGGAGGAGGCCAGG
CCCTTGGTGGAATTCTATGAGGAGATCAAGAAGTACGAGAAGCTGGAGACGGAGGAGG
CGTGTGGCCCGCAGCCGGGAGATCTTCGACTCATACATCATGAAGGAGCTGCTGGCCTGC
TCGCATCCCTTCTCGAAGAGTGCCACTGAGCATGTCCAAGGCCACCTGGGGAAGAAGCAG
GTGCCTCCGGATCTCTCCAGCCATACATCGAAGAGATTTGTCAAACCTCCGAGGGGAC
GTGTTCCAGAAATTCATTGAGAGCGATAAGTTCACACGGTTTTGCCAGTGAAGAATGTG
GAGCTCAACATCCACCTGACCATGAATGACTTCAGCGTGCATCGCATATTGGGCGCGGG
GGCTTTGGCGAGGTCTATGGGTGCCGGAAGGCTGACACAGGCAAGATGTACGCCATGAAG
TGCTTGACAAAAAGCGCATCAAGATGAAGCAGGGGGAGACCCTGGCCCTGAACGAGCGC
ATCATGCTCTCGCTCGTCAAGACTGGGGACTGCCATTATTGTCTGCATGTCATACGGC
TTCCACACGCCAGACAAGCTCAGCTTCATCCTGGACCTCATGAACGGTGGGGACCTGCAC
TACCACCTCTCCAGCAGCGGGTCTTCTCAGAGGCTGACATGCGCTTCTATGCGGCCGAG
ATCATCTGGGCCTGGAGCAGATGCACAACCGTTCGTGGTCTACCGGGACCTGAAGCCA
GCCAACATCCTTCTGGACGAGCATGGCCACGTGCGGATCTCGGACCTGGGCTGGCCTGT
GACTTCTCCAAGAAGAAGCCCCATGCCAGCGTGGGCACCCACGGGTACATGGCTCCGGAG
GTCCTGCAGAAGGGCGTGGCCTACGACAGCAGTGGCGACTGGTTCTCTCTGGGGTGCATG
CTTTCAAGTTGCTGCGGGGACAGCCCTTCCGGCAGCACAAGACCAAGACAAGCAT
GAGATCGACCCGATGACGCTGACGATGGCCGTGGAGCTGCCGACTCCTTCTCCCCTGAA
CTACGCTCCCTGCTGGAGGGTTGCTGCAGAGGGATGTCAACCGGAGATTGGGCTGCCTG
GGCCGAGGGGCTCAGGAGGTGAAAGAGAGCCCTTTTTCCGCTCCCTGGACTGGCAGATG
GTCTTCTGCAGAAGTACCCTCCCCGCTGATCCCCCAGAGGGGAGGTGAACGCGGCC
GACGCCTTCGACATTGGCTCCTTCGATGAGGAGGACACAAAAGGAATCAAGTTACTGGAC
AGTGATCAGGAGCTTACCGCAACTTCCCCCTCACCATCTCGGAGCGGTGGCAGCAGGAG
GTGGCAGAGACTGTCTTCGACACCATCAACGCTGAGACAGACCGGCTGGAGGCTCGCAAG
AAAGCCAAGAACAAGCAGCTGGGCCATGAGGAAGACTACGCCCTGGGCAAGGACTGCATC
ATGCATGGCTACATGTCCAAGATGGCAACCCCTTCTGACCCAGTGGCAGCGCGGTAC
TTCTACCTGTTCCCAACCGCTCGAGTGGCGGGGCGAGGGCGAGGCCCCGAGAGCCTG
CTGACCATGGAGGAGATCCAGTCGGTGGAGGAGACGCAGATCAAGGAGCGCAAGTGCCTG
CTCCTCAAGATCCGCGGTGGGAAACAGTTCATTTTGCAGTGCATAGCGACCCTGAGCTG
GTGCAGTGAAGAAGGAGCTGCGCGACGCCTACCGCGAGGCCAGCAGCTGGTGCAGCGG
GTGCCCAAGATGAAGAACAAGCCGCGCTCGCCCGTGGTGGAGCTGAGCAAGGTGCCGCTG
GTCCAGCGCGGACGTGCCAACGGCCTCTGA
```

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_001619 unedited</p> <pre>CTATAGGGGCGGCGCGAATTCGCACGAGGCGGGCCGGAGGCGGCGGCTCCGGGGC GCGGGCGCGGGCGGCGGCGGCGGCGCCCGACTGCAGTCCCAGCGGGAGCGGAGC GCGAGCCGGGGCCGGGCCGAGCCGCGGCCATGGGGCGGCGCCGCTGTGAGCGGCGGC AGCGGAGCCGCGGCGCCGAGCAGGGCCAGGCGGGAGGCGTCGGCGCCGAGGCCGAGC AGCCGCGCCGGGCCGGCCGAGCGCCGAGCAGGAGCGGCGGCGGCGGCGGCGGCGGCG GCGGGAGGAGGCAGCGCCGCGCAAGATGGCGGACCTGGAGGCGGTGCTGGCCGACGTG AGCTACCTGATGGCCATGGAGAAGAGCAAGGCCACGCCGCGCGCGCCAGCAAGAAG ATACTGCTGCCGAGCCAGCATCCGCAGTGTATGCAGAAGTACCTGGAGGACCGGGG GAGGTGACCTTTGAGAAGATCTTTTCCAGAAGCTGGGTACCTGCTCTCCGAGACTTC TGCCTGAACCACTGGAGGAGGCCANGCCCTTGGTNGATTCTATGAGGAGATCAAGAAG TACCAAAAGCTGGAGACGGAGGAAGAGCGTGTGGCCCGCACCCGGAGATCTTCGACTCAT ACATCATGAAAGAGCTGCTGGCCTGCTCGCATCCCTTCTCGAGAGTGCCACTGAGCATGT CCACAGCCACCTGGGGGAGAAGCAGGTGCCTCCGATTTTTTTCAGCCTACATTGAAAAGA TTTGCCAAACCTCCGAGGGGACGGTTCCGAATTCATGGGAACAAAAGTCCCCCGTTT TGCCGTGGAATAATGTGGAGCTCCACATCCCTGACCTGAATACTTAACGGCATCCATTAT TGGGCGGGGGCTTTGCGAGGCTTATGGGCCGGAGGTTACACGCAATGTCCCCTGTAGCC TGACAAACGCTTAAATGAACGGGGACCCCTGGCTGAAACGATTGTTCTTTTACCTGGAT CCTAT</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_001619 unedited</p> <pre>GGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTACTCTTTAAAACACATTCAAAA ATCGGCAAAGAAACGCCCGGGGAATGAGTAGACGGGAGGGGAGGGTGCGCCAACCCAGC CCCGGGGGGAGAAAGGCGGACACCACACAGGCAGCGGACTGGCACGAGGGGGCATGCG GTGGGCGAGGCGGCGGCACTGACAGGACGTGGGCTGTGGGGCTGGCCAGCCTGGCGGGG GTACACTGATGGGCCAGGATGGGGGACACTGATAGGCCCCAGCCAGCCTCCTTGCTGT GCTGCCGCCACCTGGCCGGCCCCGCTCTGGGCAGATGGGGTGCACCCAGCCAGCAT CAGCGAGACCTCAGGCCAGGCGAGGCCAGTATGGCCCACTGCAGGTGCCTTGCTGTGG TCCCTGAGCCCGGGTGTGGGGTTGGGCAAGAGGGGACAGCAGGGAGGGTAGCAGCAC CTGTGCAATGCCACTCTCTCAGCCAAGCCCCGAGTGCAGGGAAGTGGGAGTGGAGG CAGCCAGTGACACAGAGGCTTTTCCCTGATAAGGGCACAGGAGCCCGAGTCACTGTGGGA GGCCTTGAGGGCCAGGGAGACAACGGGCCCTCCTCTCGCAACTGTGGAGCAGGACA GTGCAAGGCTGCCCTCTGCACCAGGACGGGCGCAGTTGGGAAAATCCAAGCCGGATC CCTGGGCTTGTGCCCTGCCCTTGGGGAAGGGGGCGGGCCCCCNCTCACGCCCCATT GGCACCCATCCGATCCCTTTTACACCCCTGTGGACACCACCTCGTTGTGCCACCACA CACTGCACAACCGTATATCCCTCCACCCACCCTTCTCCGCCCGTCAATCCCAACGTC ACCCGGTACCGCCACATTACCCCGCACTACATTGCTCGCCCCGTGACCCCGTCAAC GCAGATTACCGCGTCCCACCTTACTTGACGCGTTCGACACCCAATCCACCTCGCCTG AATACCACACTTA</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_001619
<b>Insert Size:</b>	2070 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001619.2</a> , <a href="#">NP_001610.1</a>
<b>RefSeq Size:</b>	3603 bp
<b>RefSeq ORF:</b>	2070 bp
<b>Locus ID:</b>	156
<b>UniProt ID:</b>	<a href="#">P25098</a>
<b>Cytogenetics:</b>	11q13.2
<b>Domains:</b>	RGS, pkinase, S_TK_X, TyrKc, PH, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Chemokine signaling pathway, Endocytosis
<b>Gene Summary:</b>	This gene encodes a member of the G protein-coupled receptor kinase family of proteins. The encoded protein phosphorylates the beta-adrenergic receptor as well as a wide range of other substrates including non-GPCR cell surface receptors, and cytoskeletal, mitochondrial, and transcription factor proteins. Data from rodent models supports a role for this gene in embryonic development, heart function and metabolism. Elevated expression of this gene has been observed in human patients with heart failure and Alzheimer's disease. [provided by RefSeq, Sep 2017]