

Product datasheet for **SC127790**

Guanylate kinase (GUK1) (AL832986) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Guanylate kinase (GUK1) (AL832986) Human Untagged Clone
Tag:	Tag Free
Symbol:	Guanylate kinase
Synonyms:	GMK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for AL832986, the custom clone sequence may differ by one or more nucleotides

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CGGACCGTGGGGCGGACGCGTGGGATCACAGATAGGAGTCCAAGTCCATGAGAAGTTCCTGGAATAG
GTGTAGATTCAAGATCTTTACAAGACCATATCTGCAGGGCAAGGTACCAGAGGACAGAGCGGGGACA
GGGACACTTCCATTCCAGACCTAGCAGCCAGCACTCAGCACCATGCATGGGAGCAAATGGCTGGACTCC
TGGGTGGGGTGGGGTCTCAGAGCAGGCTCCCAGAGGGCTTGGAGGTGACTCCACCAGGTGGGGACGGCA
GCTCCCAGGTAGGGTGTATCAGAGTAGACAGCATTGCTTGTAGGGACCCTGGGGAGGCTGACAGGGT
CAGTGGGTTTCAAGTGGGGGCTCCCCTGCTGAGAACCAGTAAAGCCGGCCTTCCATTCGCTCCCCTG
TGCCAGAGCCTGGTCTGAGGGCCGCCCTGTGCATGCCGGCCTTCCAACGTGGCAGAGCTCAGGGGAA
GAACACCAGGCTCTCAGGAGACTCTCAGGCAATGTCTCCATCCCTGGGTGAGCCCTTCTGCCATGA
ATTGAGGAAGGCAGAGGCAGCTCAGCAGATGGGACTAGAGGCCGACTGCTATCCACAGCCTCTCTTCT
CACCCAGGCATGTGCGGCCAGGCCGTGGTGTGAGCGGGCTTGGGAGCTGGGAAGAGCACCCCT
GCTGAAGAGGCTGCTCCAGGAGCACAGCGGCATCTTTGGTTCAGCGTGTCCCGTGAAGTCCAGGGCTCTC
GTGGAGGGGTGCGTAGACCTCAAGGCTGCTGAGTAGTCCAGCAGCGTAGCAGGCCAGGAGCCAAACC
CAACAGGCACACCACCCTGCAGACTGTCCGAACCTTGCACACTCCCCCCACACAGAACCTGAGGTTA
TCACACTCCTGCTGCTGCTGCGTGCCTGTGTCTCCCTTCCCTGGGTCTGTTGAGTACTGATAACTGGGCA
CAGTGTCTTTCTGGGAGAACCCTCGCCTTGTAGGCTCCTGCGCCTTCCAGTGGTGTGCTTCACTGGC
TGCTGCATCCTGGGGCTCAAGTGTGTGCGGACTGCAAGGAAACGCTGGGTGGGGCATTGGGCTCCGA
GCAGCCCCGATGGGTGACAGGTCTCTGTGCTAGATACCACGAGGAACCCGAGGCCCGGCGAGGAGAAGC
GCAAAGGTGAGTGGGGTGGGGCCCTATGGCTGGAGCACCCCAAGTGTGGCAGGGCTGCTGGGCCCTCA
GCTGTGTTGGCTGTGCTGCCCTCTCCTGCCCATCAATCCCTAATCTGTGAGATGGGCTTCTGCCCTCA
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GAACCTGTTGGTCTCCAGTCCCCACCCATCACCACCAACTCCCAACTCCCCACTGGAACCCAGCAGTCT
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TCCCCAGATTACTACTTTGTAACCAGGAGGTGATGCAGCGTGACATAGCAGCCGGCGACTTATCGAG
CATGCCGAGTTCTCGGGGAACCTGTATGGCAGCAGCAAGGTGGCGGTGCAGGCCGTGCAGGCCATGAACC
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GCCACCCCTTGGCAGGCGATACGGCAGCTCTGTGCCCTTGGCCAGCATGTGGAGTGGAGGAGATGCTGC
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CACTCTGGACCCAGGCTGACATCCTAATAAAATAACTGTTGATTAGAACTCCAAAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for AL832986 unedited
 GGATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAGGTGGCCCC
 GGATGCTGCGGCGCCCGCTGGCCGGGCTGGCTGCGGCCGCGCTGGGCCGGGCCCCACCGG
 ACGGCATGTCGGGCCCCAGGCCTGTGGTCTGAGCGGGCCTTCGGGAGCTGGGAAGAGCA
 CCCTGCTGAAGAGGCTGCTCCAGGAGCACAGCGGCATCTTTGGCTTCAGCGTGTCCCGTG
 AGTCCAGGGCTCTCGTGGAGGGTGCCTAGACCTCAAGGCTGCTGAGTAGTCTAGCACC
 GTGAGCAGGCCAGGAGCCAAACCCAACAGGCACACCCACCTGCAGACTGTCCGAACCTC
 TTGCACACTCCCCCACACAGAACCTGAGGTTATCACACTCCTGCTGCTCCTGCGTGCCT
 GTGCTCCCTTCCCTGGGTCTGTTGAGTACTGATAACTGGGCCACAGTGTTCCTTTCTG
 GAGAACCCTCGCCTTGTAGGCTCCTGCGCCTTCCCAGTGGTGTGCTTCACTGGCTGCCTG
 CATCCTGGGGCTCAAGTGTGTCGGGACTGCAAGGAAACGCTGGGTGGGGCATTGGGCT
 CCGAGCAGCCCCGATGGGTGACAGGTCTCTGCTAGATACCACGAGGAACCCGAGGCC
 CGGCGAGGAGAACGGCANAGGTGAGTGGGTGGGGCCCTATGGCTGGAGCACCCCAAGT
 TGGGCAGGGCTGTGGGCCCTGCAGCCTGTGTGGCTGTGCTGCCCGTCTCCTGCCCCAT
 AATCCNTAATCTGTGAGATGGGTCTTGCCTCCAGGGCCCGTGAACCTCCATCAGGGTGT
 AGCGCCCCAGCGTGGTGTGCGCTTCCCTTGGGTACAGTGTGAGAAGGCCCGCCAGGCCTGGN
 GCTGTNCTCCTCCACCTGNNAGNGNCACAGTGTGCTGTCCCCAGCCTGTCTGGAC

3' Read Nucleotide Sequence:

>OriGene 3' read for AL832986 unedited
 GCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTCTAATCCAACAGTTATTTTATTAGGA
 TGACAACCCTGGGTCCAGAGCGAGAGATAGGGACAGGGGACACCCACCGAGGCTGGGTC
 GGGGGTACACCCAGGATGTTCTAACCATAGGGGACAGCATATTCTTCACTTACATGCTGC
 CCAAGGGCACTCCACCTGACGTATCATCTCCAAGGGGCGCCCTCAATGCTCCTGCAT
 TGAATCTGAATGGCCCTGGTGTGTCACCCCTCACCTCCCCACTCGTTACATATCTCT
 TACTTCCCGTCCACTCCCTTATAATCCCCCTTCCCTCCCCCCCCCTCCCCCACTTCCC
 CTTCCTCTCTTTATCATTTTTTTTACCCCGTCTCCCTACCTTTTTTTCTACTCCCTCC
 TTTGGTCTACTCCATTATCCACCCCTCTCCCTATCCCTCTTCTCTACCCAATC
 CGACCCCTATTTCCACCACCTATAAATACCCCTTCCCTTTTCTATACCACCAC
 CTCCCCCTTCTGCCACTTATTCTTCTCAACTCTCCCTCCCCATCCCATCCTTCTT
 CTTACCACCTCTTTGCCACACCACTCCCGAATTACATCCTCCTCCCTTTCTTTTTT
 CCCCCCTCCTTCCGCGCGTCTACCCATCATTCTACACCCTGGACACCCTACTTTCC
 CTCACCATTTTTATCCCCCTTCTACCAACCACCCGCCATTTCCCGCCATACCATCATCT
 TACCCAGCCCAATTCCCCACAAAACACTTCTCCTTCCCCATTTCCATTTTATCCTC
 CTCACTTCCACCCTTCTCTACTACTTTTTCCACCCCCCCCTCTTTTCTCCCT
 CCTCTAATCTATGTTCTACTATTCTACCCACCCTCACTCCACCCCGATACCCCGT
 CNTACTATACCCCTTCCCAATTCTTTTCTTCCCCCTTTTCTTCCCATTTCCCT
 CCT

Restriction Sites:

NotI-NotI

ACCN:

AL832986

Insert Size:

2200 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).

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: [AL832986.1](#), [CAH56207.1](#)

RefSeq Size: 2590 bp

RefSeq ORF: 2590 bp

Locus ID: 2987

Cytogenetics: 1q42.13

Domains: Guanylate_kin, GuKc

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Purine metabolism

Gene Summary: The protein encoded by this gene is an enzyme that catalyzes the transfer of a phosphate group from ATP to guanosine monophosphate (GMP) to form guanosine diphosphate (GDP). The encoded protein is thought to be a good target for cancer chemotherapy. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2011]