

Product datasheet for **RC239184**

GUCY1B1 (NM_001291951) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GUCY1B1 (NM_001291951) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GUCY1B1
Synonyms:	GC-S-beta-1; GC-SB3; GUC1B3; GUCB3; GUCSB3; GUCY1B3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC239184 representing NM_001291951
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGTACGGATTTGTGAATCACGCCCTGGAGTTGCTGGTATCCGCAATTACGGCCCCGAGGTGTGGGAAG
ACATCAAAAAGAGGCACAGTTAGATGAAGAAGGACAGTTTCTTGTCAGAATAATATATGATGACTCCAA
AACTTATGATTTGGTTGCTGCTGCAAGCAAAGTCTCAATCTCAATGCTGGAGAAATCCTCCAAATGTTT
GGGAAGATGTTTTCTGCTTTTGCCAAGAATCTGGTTATGATACAATCTTGCGTGTCTGGGCTCTAATG
TCAGAGAAATTTACAGAAGAATGAATCAAAGCATATTTTACAGTTTACATCATTGTTTCTGGGAATCTA
CTTGCTGCAATAACCTTGATGCTCTGCACGACCACCTTGCTACCATCTACCCAGGAATGCGTGCACCT
TCCTTTAGGTGACTGATGCAGAAAAGGGCAAAGGACTCATTGCTACTACTCAGAGAGAGAAGGAC
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GAGGATTTTTATGAAGATCTTGACAGATTTGAAGAAAATGGTACCCAGGAATCACGCATCAGCCCATATA
CATTCTGCAAAGCTTTTCTTTTCAATATAATTTGACCGGGACCTAGTGGTCACTCAGTGTGGCAATGC
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CCTCATATTGATATTAGTTTCCATGGGATCCTTCTCACATCAATACTGTTTTTGTATTGAGAAGCAAGG
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GCACAGAGGCCAGTGTCCATGAAGGGCAAAAAGAACCAATGCAAGTTTGGTTTCTATCCAGAAAAAAT
ACAGGAACAGAGGAAACAAGCAGGATGATGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239184 representing NM_001291951
 Red=Cloning site Green=Tags(s)

MYGFVNHALELLVIRNYGPEVWEDIKKEAQLDEEGQFLVRIIYDDSKTYDLVAAASKVLNLNAGEILQMF
 GKMFVFCQESGYDILRVLGNSNVREFLQKNESKHISDLHHCFLGIYLCNNLDALHDHLATIYPGMRAP
 SFRCTDAEKGKGLILHYYSERELQDIVIGI IKTVAQQIHGTEIDMKVIQQRNEECDHTQFLIEEKESKE
 EDFYEDLDRFEENGTSRISPYTFCKAFPFIIFDRDLVVTQCGNAIYRVLPQLQPGNCSLLSVFSLVR
 PHIDISFHGILSHINTVFLRSKEGLLDVEKLECEDELGTETISCLRKGMIIYLPEADSILFLCSPSVM
 NLDDLTRRGLYLSDIPLHDATRDLVLLGEQFREEYKLTQELEILTDRLQLTLRALEDEKKTDTLLYSVL
 PPSVANELRHKRPVPAKRYDNVTILFSGIVGFNAFCSKHASGEGAMKIVNLLNDLYTRFDLTDNRKNPF
 VYKVVTVGDKYMTVSGLPEPCIHHARSICHLALDMMIEIAGQVQVDGESVQITIGIHTGEVVTGVIGQRMP
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 TGTEETKQDDD

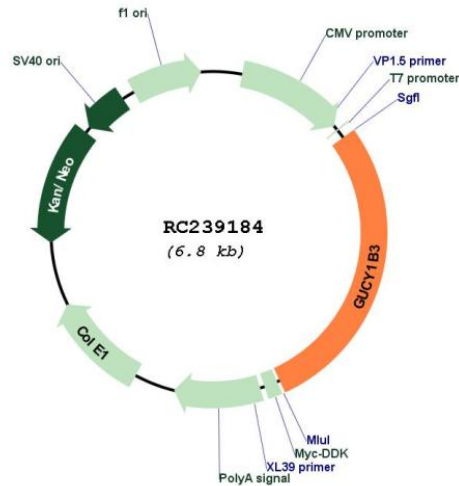
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001291951

ORF Size: 1923 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001291951.2](#)

RefSeq Size:	3327 bp
RefSeq ORF:	1926 bp
Locus ID:	2983
Cytogenetics:	4q32.1
Protein Families:	Druggable Genome
Protein Pathways:	Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction
MW:	73.5 kDa
Gene Summary:	This gene encodes the beta subunit of the soluble guanylate cyclase (sGC), which catalyzes the conversion of GTP (guanosine triphosphate) to cGMP (cyclic guanosine monophosphate). The encoded protein contains an HNOX domain, which serves as a receptor for ligands such as nitric oxide, oxygen and nitrovasodilator drugs. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]