

## Product datasheet for **SC336754**

### **GUCY1B1 (NM\_001291955) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GUCY1B1 (NM_001291955) Human Untagged Clone
Tag:	Tag Free
Symbol:	GUCY1B1
Synonyms:	GC-S-beta-1; GC-SB3; GUC1B3; GUCB3; GUCSB3; GUCY1B3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



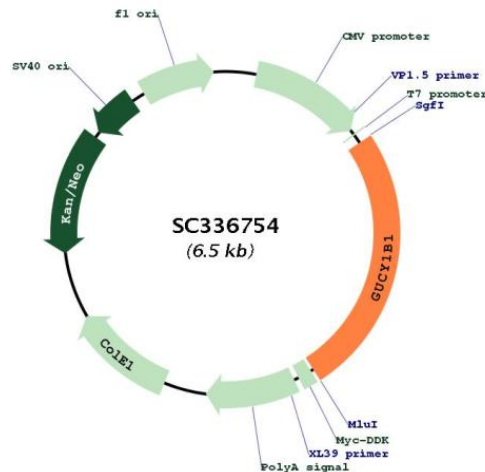
[View online »](#)

**Fully Sequenced ORF:** >SC336754 representing NM\_001291955.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTTGGGAAGATGTTTTTCGCTTTTTGCCAAGAATCTGGTTATGATACAATCTTGCCTGTCCTGGGC
TCTAATGTCAGAGAATTTCTACAGAACCCTTGATGCTCTGCACGACCACCTTGCTACCATCTACCCAGGA
ATGCGTGCACCTTCCTTTAGGTGCACTGATGCAGAAAAGGGCAAAGGACTCATTTTGCCTACTACTCA
GAGAGAGAAGGACTTCAGGATATTGTCATTGGAATCATCAAAACAGTGGCACAACAAATCCATGGCACT
GAAATAGACATGAAGTTATTACAGCAAAGAAATGAAGAATGTGATCATACTCAATTTTTAATTGAAGAA
AAAGAGTCAAAAAGAGGATTTTTATGAAGATCTTGACAGATTTGAAGAAAATGGTACCCAGGAATCA
CGCATCAGCCATATACATTCTGCAAAGCTTTTCTTTTCATATAATTTGACCGGGACCTAGTGGTC
ACTCAGTGTGGCAATGCTATATACAGAGTTCTCCCCAGCTCCAGCTGGGAATTGCAGCCTTCTGTCT
GTCTTCTCGCTGGTTCGTCCTCATATTGATATTAGTTTCCATGGGATCCTTTCTCACATCAATACTGTT
TTTGATTGAGAAGCAAGGAAGGATTGTTGGATGTGGAGAAATAGAATGTGAGGATGAAGTACTGACTGGG
ACTGAGATCAGCTGCTTACGTCTCAAGGTCAAATGATCTACTTACCTGAAGCAGATAGCATACTTTTT
CTATGTTACCAAGTGTGATGAACCTGGACGATTTGACAAGGAGAGGGCTGTATCTAAGTACATCCCT
CTGCATGATGCCACGCGCATCTTGTCTTTTGGGAGAACAATTTAGAGAGGAATACAAACTCACCCAA
GAAGTGGAAATCCTCACTGACAGGCTACAGCTCACGTTAAGAGCCCTGGAAGATGAAAAGAAAAGACA
GACACATTGCTGTATTCTGTCTTCTCCGTCTGTTGCCAATGAGCTGCGGCACAAGCGTCCAGTGCCT
GCCAAAAGATATGACAAATGTGACCATCCTCTTTAGTGGCATTGTGGGCTTCAATGCTTTCTGTAGCAAG
CATGCATCTGGAGAAGGAGCCATGAAGATCGTCAACCTCCTCAACGACCTCTACACCAGATTTGACACA
CTGACTGATTTCCGGAAAAACCCATTTGTTTATAAGGTGGAGACTGTTGGTGACAAGTATATGACAGTG
AGTGGTTTACCAGAGCCATGCATTCACCATGCACGATCCATCTGCCACCTGGCCTTGGACATGATGGAA
ATTGCTGGCCAGTTCAAGTAGATGGTGAATCTGTTTCCAGATAACAATAGGGATACACACTGGAGAGGTA
GTTACAGGTGTCATAGGACAGCGGATGCCTCGATACTGTCTTTTTGGGAATACTGTCAACCTCACAAGC
CGAACAGAAACCACAGGAGAAAAGGAAAAATAAATGTGTCTGAATATACATACAGATGTCTTATGTCT
CCAGAAAATTCAGATCCACAATTCCTTGGAGCACAGAGGCCAGTGTCCATGAAGGGCAAAAAGAA
CCAATGCAAGTTTGGTTTCTATCCAGAAAAATACAGGAACAGAGGAAACAAAGCAGGATGATGACTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

**Restriction Sites:** SgfI-MluI

## Plasmid Map:



ACCN: NM\_001291955

Insert Size: 1656 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: [NM\\_001291955.1](#)

RefSeq Size: 3187 bp

RefSeq ORF: 1656 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: 62.8 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]

Transcript Variant: This variant (6) differs in the 5' UTR and 5' coding region, initiates translation at a downstream start codon and lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. It encodes isoform 6, which is shorter than isoform 1.