

Product datasheet for **SC322151**

GUCY1B1 (NM_000857) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GUCY1B1 (NM_000857) 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-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for SC322151
 GTGGCCGCTGCCGCTCTGCCTGGGTCCCTTCGGCCGTACCTCTGCGTGGGGGCTGCCTC
 CCCGGCTCCCGGTGCAGACACCATGTACGGATTTGTGAATCACGCCCTGGAGTTGCTGGT
 GATCCGCAATTACGGCCCGAGGTGTGGGAAGACATCAAAAAAGAGGCACAGTTAGATGA
 AGAAGGACAGTTTCTTGTGAGAATAATATATGATGACTCCAAAATTATGATTTGGTTGC
 TGCTGCAAGCAAAGTCTCAATCTCAATGCTGGAGAAATCCTCCAAATGTTTGGGAAGAT
 GTTTTTCGTCTTTTGCCAAGAATCTGGTTATGATAACAATCTTGCCTGCTCCTGGGCTCAA
 TGTCAGAGAATTTCTACAGAACCCTTGATGCTCTGCAGACCACCTTGCTACCATCTACCC
 AGGAATGCGTGACCTTCTTTAGGTGCACTGATGCAGAAAAGGGCAAAGGACTCATTTT
 GCACTACTACTCAGAGAGAAGGACTTCAGGATATTGTCATTGGAATCATCAAAACAGT
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CAACTACTTTTGTGTAATAATGTTTGCCTTTAAATTTAGTATTTTATATCAGCACATCGA
TATATGTATAAATGTTCCATGTTAATGTGTAAGAGTCTGTAATAAATTTTTTTTTCA
CGTGTCAAAAAAAAAAAAAAAAAA

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Restriction Sites:

Please inquire

ACCN:

NM_000857

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).

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_000857.1 , NP_000848.1
RefSeq Size:	2443 bp
RefSeq ORF:	1860 bp
Locus ID:	2983
UniProt ID:	Q02153
Cytogenetics:	4q32.1
Domains:	CYCc
Protein Families:	Druggable Genome
Protein Pathways:	Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. It encodes isoform 2, which lacks an internal segment and is shorter than isoform 1.</p>