

Product datasheet for **RG238991**

GUCY1B1 (NM_001291954) Human Tagged ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | GUCY1B1 (NM_001291954) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | GUCY1B1 |
| Synonyms: | GC-S-beta-1; GC-SB3; GUC1B3; GUCB3; GUCSB3; GUCY1B3 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG238991 representing NM_001291954.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
  
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Protein Sequence:

>Peptide sequence encoded by RG238991
 Blue=ORF Red=Cloning site Green=Tag(s)

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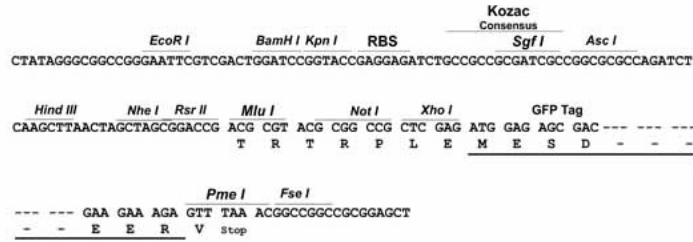
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Restriction Sites:

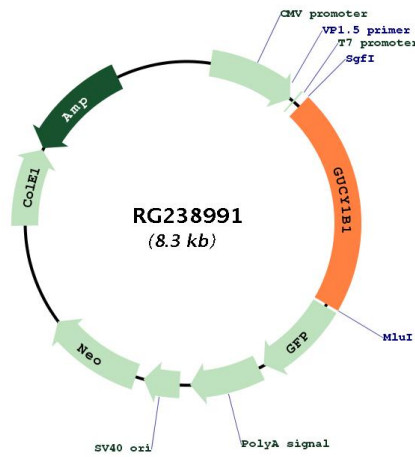
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001291954

ORF Size: 1758 bp

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|--------------------------|--|
| 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). |
| RefSeq: | NM_001291954.2 |
| RefSeq Size: | 3162 bp |
| RefSeq ORF: | 1761 bp |
| Locus ID: | 2983 |
| UniProt ID: | Q02153 |
| Cytogenetics: | 4q32.1 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction |
| MW: | 67.2 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] |