

## Product datasheet for **RG222599**

### PGGT1B (NM\_005023) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PGGT1B (NM_005023) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PGGT1B
Synonyms:	BGGI; GGTI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222599 representing NM_005023 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGGCCACTGAGGATGAGAGGCTAGCAGGGAGCGGTGAGGGAGAGCGGCTGGATTTCTACGGGATC  
GGCACGTGCGATTTTCCAGCGCTGCCTCCAGTTTTGCCGGAGCGCTATTCTTCACTCGAGACAAGCAG  
GTTGACAATTGCATTTTTGCACCTCCGGCTGGATATGTTGGATTCTTAGATGTGGTGAACAAAGAT  
GATATAATAGAGTGGATTTATCCCTGCAGTCTTCCCACAGAAGACAGATCAAATCTAAATCGCTGTG  
GTTCCGAGGCTTTCATACCTGGTATTCGGTCAATCCATCAAAGGCTCCTGGAACAGCTCATCCTTA  
TGATAGTGGCCACATTGCAATGACCTACACTGGCCTCTCATGCTTAGTTATTCTTGGAGACGACTTAAGC  
CGAGTAAATAAAGAAGCTTGCTTAGCGGGCTTGAGAGCCCTTCAGCTGGAAGATGGGAGTTTTGTGCAG  
TACCTGAAGGCAGTGAATGACATGCGATTTGTGACTGTGCTTCTGTATTTGCTATATGCTCAACAA  
CTGGTCAGGCATGGATATGAAAAAGCCATCACCTATATTAGAAGGAGTATGTCCATGACAATGGACTG  
GCACAGGGAGCTGGACTTGAATCTATGGAGGATCAACTTTTTGTGGCATTGCCTCACTATGTCTGATGG  
GTAACACTAGAAGAAGTTTTTTCAGAAAAAGAATTGAACAGGATAAAGAGGTGGTGTATAATGAGGCAACA  
AAATGGTTATCATGGAAGACCTAATAAGCCTGTAGACACCTGTTATTCTTTTTGGTGGGAGCAACTCTG  
AAGCTTCTAAAAATTTTCCAATACACTAACTTTGAGAAAAATGAAATTACATCTTCAACTCAAGATC  
GCCTTGTAGGGGATTTGCCAAGTGCCAGACAGTCATCCAGATGCTTTGCATGCATACTTTGGGATCTG  
TGGCCTGTCACTAATGGAGGAAAGTGAATTTGTAAGTTTCATCCTGCTCTGAATGTAAGCACACGGACT  
TCTGAACGCTTCTAGATCTCCATCAAAGCTGGAACCAAGGACTCTAAACAATGCTCAGAGAATGTAC  
ATATCTCCACA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG222599 representing NM\_005023  
Red=Cloning site Green=Tags(s)

MVATEDERLAGSGEGERLDFLRDRHVRFFQRCLQVLPERYSSLETSRLTIAFFALSGLDMLDSLDDVVKD  
 DIIIEWIYSLQVLPTEDRSNLNRCGFRGSSYLGIPFNPSKAPGTAHPYDSGHIAMTYTGLSCLVILGDDLS  
 RVNKEACLALRALQLEDGSFCVPEGSENDMRFVYCASCICYMLNNWSGMDMKKAITIYIRRSMSYDNLG  
 AQGAGLESHGGSTFCGIASLCLMGKLEEVFSEKELNRIKRWCIMRQQNGYHGRPNKPVDTCYSFVWGATL  
 KLLKIFQYTNFEKNRNYILSTQDRLVGGFAKWPDSDHPDALHAYFGICGLSLMEESGICKVHPALNVSTRT  
 SERLLDLHQSWKTKDSKQCSENVHIST

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3214\\_d11.zip](https://cdn.origene.com/chromatograms/ja3214_d11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005023

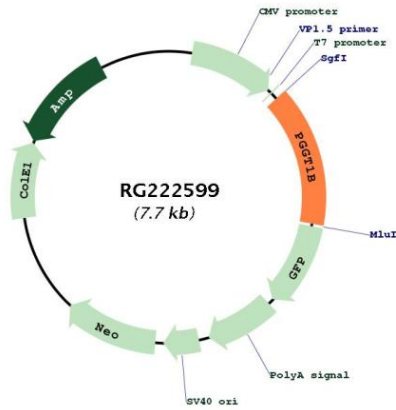
**ORF Size:** 1131 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_005023.2</a> , <a href="#">NP_005014.1</a>
<b>RefSeq Size:</b>	1659 bp
<b>RefSeq ORF:</b>	1134 bp
<b>Locus ID:</b>	5229
<b>UniProt ID:</b>	<a href="#">P53609</a>
<b>Cytogenetics:</b>	5q22.3
<b>Domains:</b>	prenyltrans
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	Protein geranylgeranyltransferase type I (GGTase-I) transfers a geranylgeranyl group to the cysteine residue of candidate proteins containing a C-terminal CAAX motif in which 'A' is an aliphatic amino acid and 'X' is leucine (summarized by Zhang et al., 1994 [PubMed 8106351]). The enzyme is composed of a 48-kD alpha subunit (FNTA; MIM 134635) and a 43-kD beta subunit, encoded by the PGGT1B gene. The FNTA gene encodes the alpha subunit for both GGTase-I and the related enzyme farnesyltransferase.[supplied by OMIM, Mar 2010]

Product images:



Circular map for RG222599