

## Product datasheet for **RG230777**

### glutathione S transferase Omega 1 (GSTO1) (NM\_001191003) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	glutathione S transferase Omega 1 (GSTO1) (NM_001191003) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GSTO1
Synonyms:	GSTO 1-1; GSTTLp28; HEL-S-21; P28; SPG-R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230777 representing NM_001191003 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGGGGAGTCAGCCAGGAGCTTGGGGAAGGGAAGCGCGCCCCGGGGCCGGTCCCGGAGGGCTCGA  
TCCGCATCTACAGCATGAGGTTCTGCCGTTTGTCTGAGAGGACGCGTCTAGTCCTGAAGCCAAGGGAAT  
CAGGCATGAAGTCATCAATATCAACCTGAAAAATAAGCCTGAGTGGTTCTTTAAGAAAAATCCCTTTGGT  
CTGGTGCCAGTTCTGAAAACAGTCAGGGTCAGCTGATCTACGAGTCTGCCATCACCTGTGAGTACCTGG  
ATGAAGCATACCCAGGGAAGAAGCTGTTGCCGGATGACCCCTATGAGAAAGCTTGCCAGAAGATGATCTT  
AGAGTTGTTTTCTAAGGTGCCATCCTTGGTAGGAAGCTTTATTAGAAGCCAAAATAAAGAAGACTATGCT  
GGCCTAAAAGAAGAATTCGTAAGAATTTACCAAGCTAGAGGAGTTCTGACTAATAAGAAGACGACCT  
TCTTTGGTGGCAATTCTATCTCTATGATTGATTACCTCATCTGGCCCTGGTTTGAACGGCTGGAAGCAAT  
GAAGTTAATGAGTGTGTAGACCACACTCCAAAAGTAACTGTGGATGGCAGCCATGAAGGAAGATCCC  
ACAGTCTCAGCCCTGCTTACTAGTGAGAAAGACTGGCAAGGTTTCTAGAGCTCTACTTACAGAACAGCC  
CTGAGGCCTGTGACTATGGGCTC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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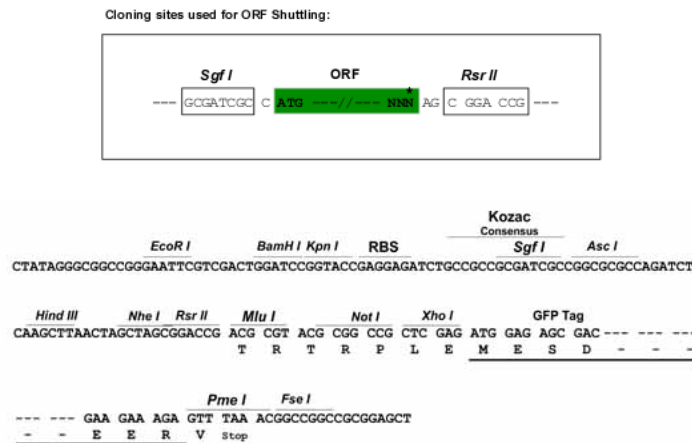
**Protein Sequence:** >RG230777 representing NM\_001191003  
Red=Cloning site Green=Tags(s)

MSGESARSLGKGSAPPGVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFG  
 LVPVLENSQGQLIYESAITCEYLDEAYPGKLLPDDPYEKACQKMILELFSKVPSLVGSFIRSQNKEDYA  
 GLKEEFRKEFTKLEEVLTNNKTTFFGGNSISMIDYLIWPWFERLEAMKLNCEVDHTPKLKLWMAAMKEDP  
 TVSALLTSEKDQGFLELYLQNSPEACDYGL

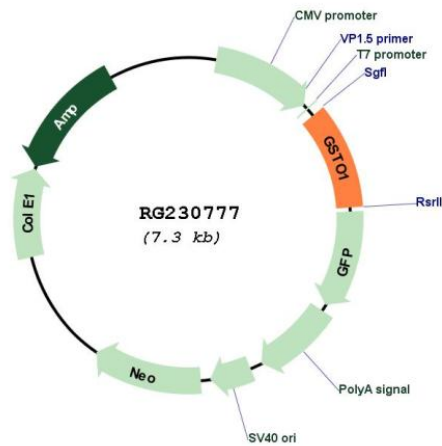
SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001191003

**ORF Size:** 726 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_001191003.1</a> , <a href="#">NP_001177932.1</a>
<b>RefSeq Size:</b>	1070 bp
<b>RefSeq ORF:</b>	642 bp
<b>Locus ID:</b>	9446
<b>UniProt ID:</b>	<a href="#">P78417</a>
<b>Cytogenetics:</b>	10q25.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
<b>Gene Summary:</b>	The protein encoded by this gene is an omega class glutathione S-transferase (GST) with glutathione-dependent thiol transferase and dehydroascorbate reductase activities. GSTs are involved in the metabolism of xenobiotics and carcinogens. The encoded protein acts as a homodimer and is found in the cytoplasm. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]