

Product datasheet for **RG200362**

glutathione S transferase Omega 1 (GSTO1) (NM_004832) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | glutathione S transferase Omega 1 (GSTO1) (NM_004832) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | glutathione S transferase Omega 1 |
| 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: | >RG200362 representing NM_004832 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGGGGAGTCAGCCAGGAGCTTGGGGAAGGGAAGCGCGCCCCGGGGCCGGTCCCGGAGGGCTCGA
TCCGCATCTACAGCATGAGGTTCTGCCGTTTGTCTGAGAGGACGCGTCTAGTCCTGAAGCCAAGGGAAT
CAGGCATGAAGTCATCAATATCAACCTGAAAAATAAGCCTGAGTGGTTCTTTAAGAAAAATCCCTTTGGT
CTGGTGCCAGTTCTGAAAACAGTCAGGGTCAGCTGATCTACGAGTCTGCCATCACCTGTGAGTACCTGG
ATGAAGCATACCCAGGGAAGAAGCTGTTGCCGGATGACCCCTATGAGAAAGCTTGCCAGAAGATGATCTT
AGAGTTGTTTTCTAAGGTGCCATCCTTGGTAGGAAGCTTTATTAGAAGCCAAAATAAAGAAGACTATGCT
GGCCTAAAAGAAGAATTCGTAAGAATTTACCAAGCTAGAGGAGTTCTGACTAATAAGAAGACGACCT
TCTTTGGTGGCAATTCTATCTCTATGATTGATTACCTCATCTGGCCCTGGTTTGAACGGCTGGAAGCAAT
GAAGTTAATGAGTGTGTAGACCACACTCCAAAAGTAAAGTGTGGATGGCAGCCATGAAGGAAGATCCC
ACAGTCTCAGCCCTGCTTACTAGTGAGAAAGACTGGCAAGGTTTCTAGAGCTCTACTTACAGAACAGCC
CTGAGGCCTGTGACTATGGGCTC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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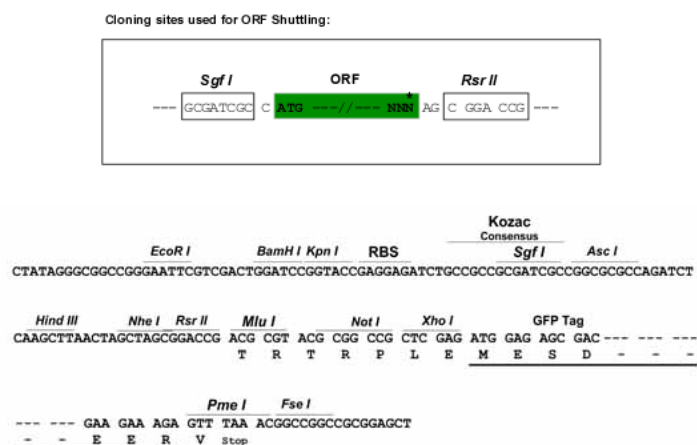
Protein Sequence: >RG200362 representing NM_004832
 Red=Cloning site Green=Tags(s)

MSGESARSLGKGSAPPGVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFG
 LVPVLENSQGQLIYESAITCEYLDEAYPGKLLPDDPYEKACQKMLELFSKVPSLVGSFIRSQNKEDYA
 GLKEEFRKEFTKLEEVLTNNKTTFFGGNSISMIDYLIWPWFERLEAMKLNCEVDHTPKLKLWMAAMKEDP
 TVSALLTSEKDQGFLELYLQNSPEACDYGL

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_004832

ORF Size: 723 bp

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).

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_004832.3](#)

RefSeq Size: 793 bp

RefSeq ORF: 726 bp

Locus ID: 9446

UniProt ID: [P78417](#)

Cytogenetics: 10q25.1

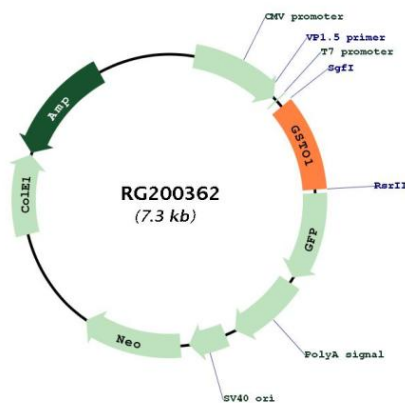
Domains: GST_N, GST_C

Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450

Gene Summary: 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]

Product images:



Circular map for RG200362