

## Product datasheet for RC200362

### 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:	Myc-DDK
Symbol:	GSTO1
Synonyms:	GSTO 1-1; GSTTLp28; HEL-S-21; P28; SPG-R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200362 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGGGGAGTCAGCCAGGAGCTTGGGGAAGGGAAGCGCGCCCCGGGGCCGGTCCCGGAGGGCTCGA  
TCCGCATCTACAGCATGAGGTTCTGCCGTTTGCTGAGAGGACGCGTCTAGTCCTGAAGCCAAGGGAAT  
CAGGCATGAAGTCATCAATATCAACCTGAAAAATAAGCCTGAGTGGTCTTTAAGAAAAATCCCTTTGGT  
CTGGTGCCAGTTCTGAAAACAGTCAGGGTCAGCTGATCTACGAGTCTGCCATCACCTGTGAGTACCTGG  
ATGAAGCATACCCAGGGAAGAAGCTGTTGCCGGATGACCCCTATGAGAAAGCTTGCCAGAAGATGATCTT  
AGAGTTGTTTTCTAAGGTGCCATCCTTGGTAGGAAGCTTTATTAGAAGCCAAAATAAAGAAGACTATGCT  
GGCCTAAAAGAAGAATTCGTAAGAATTTACCAAGCTAGAGGAGTTCTGACTAATAAGAAGACGACCT  
TCTTTGGTGGCAATTCTATCTCTATGATTGATTACCTCATCTGGCCCTGGTTTGAACGGCTGGAAGCAAT  
GAAGTTAATGAGTGTGTAGACCACACTCCAAAAGTAACTGTGGATGGCAGCCATGAAGGAAGATCCC  
ACAGTCTCAGCCCTGCTTACTAGTGAGAAAGACTGGCAAGGTTTCTAGAGCTCTACTTACAGAACAGCC  
CTGAGGCCTGTGACTATGGGCTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200362 protein sequence  
 Red=Cloning site Green=Tags(s)

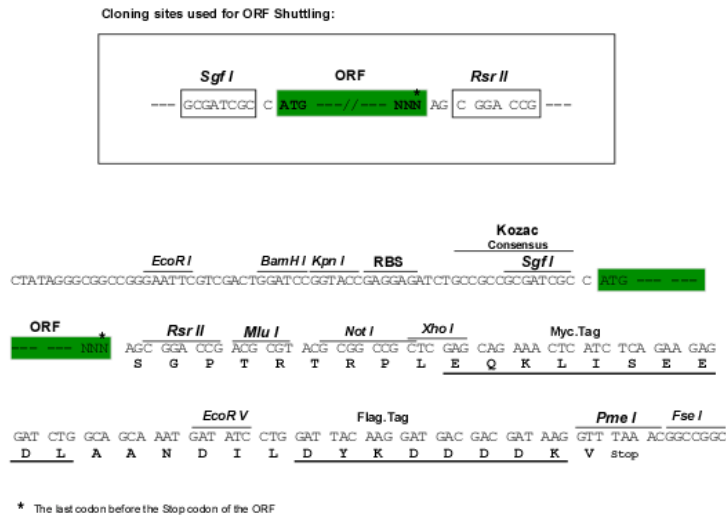
MSGESARSLGKGSAPPGVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFG  
 LVPVLENSQGQLIYESAITCEYLDEAYPGKLLPDDPYEKACQKMILELFSKVPSLVGSFIRSQNKEDYA  
 GLKEEFRKEFTKLEEVLTNNKTTFFGGNSIS MIDYLIWPWFERLEAMKLNCEVDHTPKLKLWMAAMKEDP  
 TVSALLTSEKDWQGFLELYLQNSPEACDYGL

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

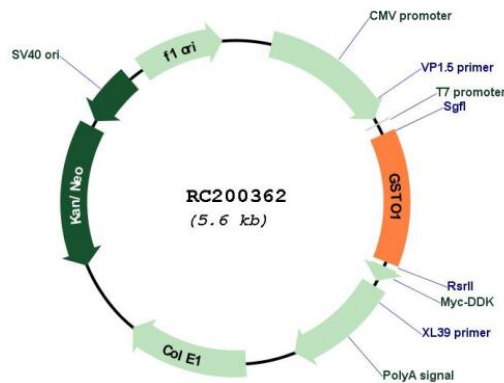
Chromatograms: [https://cdn.origene.com/chromatograms/mk6614\\_a10.zip](https://cdn.origene.com/chromatograms/mk6614_a10.zip)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:

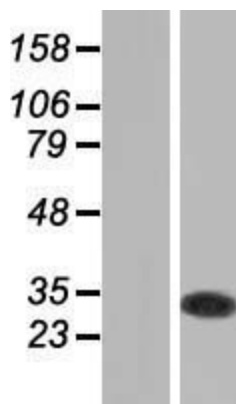


ACCN: NM\_004832

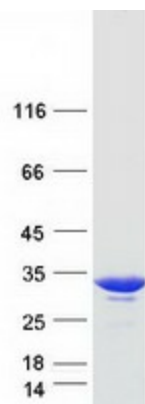
ORF Size: 723 bp

<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_004832.3</a>
<b>RefSeq Size:</b>	1017 bp
<b>RefSeq ORF:</b>	726 bp
<b>Locus ID:</b>	9446
<b>UniProt ID:</b>	<a href="#">P78417</a>
<b>Cytogenetics:</b>	10q25.1
<b>Domains:</b>	GST_N, GST_C
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
<b>MW:</b>	27.6 kDa
<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]

## Product images:



Western blot validation of overexpression lysate (Cat# [LY417720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200362 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GSTO1 protein (Cat# [TP300362]). The protein was produced from HEK293T cells transfected with GSTO1 cDNA clone (Cat# RC200362) using MegaTran 2.0 (Cat# [TT210002]).