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Product datasheet for RC230777

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:	Myc-DDK
Symbol:	GSTO1
Synonyms:	GSTO 1-1; GSTTLp28; HEL-S-21; P28; SPG-R
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230777 representing NM_001191003 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCCGGGGAGTCAGCCAGGAGCTTGGGGAAGGGAAGCGCGCCCCCGGGGCCGGTCCCGGAGGGCTCGA TCCGCATCTACAGCATGAGGTTCTGCCCGTTTGCTGAGAGGACGCGTCTAGTCCTGAAGGCCAAGGGAAT CAGGCATGAAGTCATCAATATCAACCTGAAAAATAAGCCTGAGTGGTTCTTTAAGAAAAATCCCTTTGGT CTGGTGCCAGTTCTGGAAAACAGTCAGGGTCAGCTGATCTACGAGTCTGCCATCACCTGTGAGTACCTGG ATGAAGCATACCCAGGGAAGAAGCTGTTGCCGGATGACCCCTATGAGAAAGCTTGCCAGAAGATGATCTT AGAGTTGTTTTCTAAGGTGCCATCCTTGGTAGGAAGCTTTATTAGAAGCCAAAATAAAGAAGACTATGCT GGCCTAAAAGAAGAATTTCGTAAAGAATTTACCAAGCTAGAGGAGGTTCTGACTAATAAGAAGACGACCT TCTTTGGTGGCAATTCTATCTCTATGATTGATTACCTCATCTGGCCCTGGTTTGAACGGCTGGAAGCAAT GAAGTTAAATGAGTGTGTAGACCACACTCCAAAACTGAAACTGTGGATGGCAGCCATGAAGGAAGATCCC ACAGTCTCAGCCCTGCTTACTAGTGAGAAAGACTGGCAAGGTTTCCTAGAGCTCTACTTACAGAACAGCC CTGAGGCCTGTGACTATGGGCTC AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC TGGATTACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

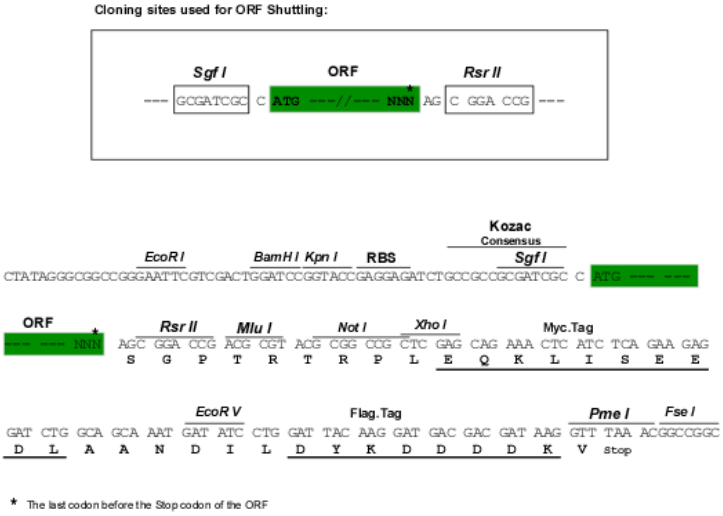
>RC230777 representing NM_001191003
Red=Cloning site Green=Tags(s)

MSGESARSLGKGSAPPGPVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFG
LVPVLENSQGQLIYESAITCEYLDEAYPGKKLLPDDPYEKACQKMILELFSKVPSLVGSFIRSQNKEDYA
GLKEEFRKEFTKLEEVLTNKKTTFFGGNSISMIDYLIWPWFERLEAMKLNECVDHTPKLKLWMAAMKEDP
TVSALLTSEKDWQGFLELYLQNSPEACDYGL

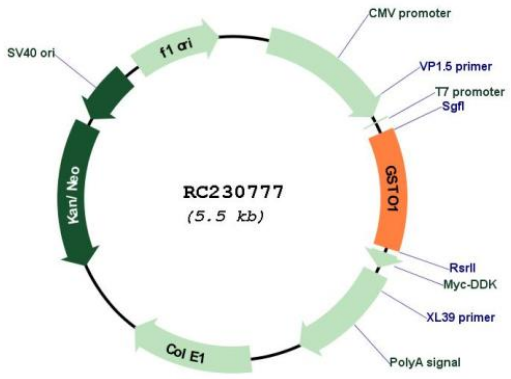
SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_001191003

ORF Size: 726 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_001191003.1, NP_001177932.1
RefSeq Size:	1070 bp
RefSeq ORF:	642 bp
Locus ID:	9446
UniProt ID:	P78417
Cytogenetics:	10q25.1
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
MW:	27.6 kDa
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]