

Product datasheet for **RC235797**

Glutathione S Transferase theta 1 (GSTT1) (NM_001293809) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Glutathione S Transferase theta 1 (GSTT1) (NM_001293809) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GSTT1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC235797 representing NM_001293809
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCCCTGTTTTCTGGGTGAGCCAGTATCTCCCAGACACTGGCAGCCACCCTGGCAGAGTTGGATG
TGACCC**TGCAGTTGCTCGAGGACAAGTTCTCCAGAACAAGCCCTTCTTACTGGTCCTCACATCTCCTT**
AGCTGACCTCGTAGCCATCAGGAGCTGATGCATCCCGTGGGTGCTGGCTGCCAAGTCTTGAAGGCCGA
CCCAAGCTGGCCACATGGCGGCAGCGCTGGAGGCAGCAGTGGGGAGGACCTTCCAGGAGGCCATG
AGGTCATTCTGAAGGCCAAGGACTTCCACCTGCAGACCCACCATAAAGCAGAAGCTGATGCCCTGGGT
GCTGGCCATGATCCGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC235797 representing NM_001293809
Red=Cloning site Green=Tags(s)

MFPVFLGEPVSPQTLAATLAELDVTLLQLLEDKFLQNKAFLTGPHISLADLVAITELMHPVGAGCQVFEGR
PKLATWRQRVEAAVGEDLFQEAHEVILKAKDFPPADPTIKQKLMWPVWLAMIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

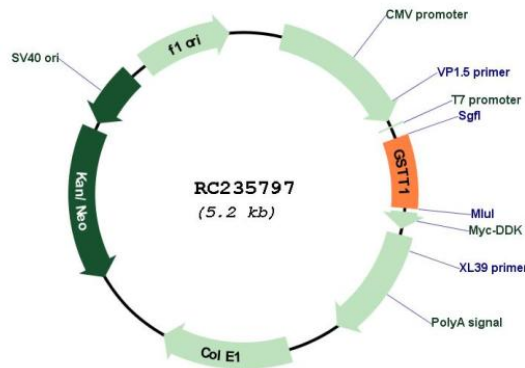


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001293809

ORF Size: 366 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:	<ol style="list-style-type: none"> 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:	<u>NM_001293809.1</u> , <u>NP_001280738.1</u>
RefSeq Size:	870 bp
RefSeq ORF:	369 bp
Locus ID:	2952
UniProt ID:	<u>P30711</u>
Cytogenetics:	22q11.23
Protein Pathways:	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
MW:	14 kDa
Gene Summary:	The protein encoded by this gene, glutathione S-transferase (GST) theta 1 (GSTT1), is a member of a superfamily of proteins that catalyze the conjugation of reduced glutathione to a variety of electrophilic and hydrophobic compounds. Human GSTs can be divided into five main classes: alpha, mu, pi, theta, and zeta. The theta class includes GSTT1, GSTT2, and GSTT2B. GSTT1 and GSTT2/GSTT2B share 55% amino acid sequence identity and may play a role in human carcinogenesis. The GSTT1 gene is haplotype-specific and is absent from 38% of the population. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Sep 2015]