

Product datasheet for **SC333691**

Glutathione S Transferase theta 1 (GSTT1) (NM_001293809) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glutathione S Transferase theta 1 (GSTT1) (NM_001293809) Human Untagged Clone
Tag:	Tag Free
Symbol:	Glutathione S Transferase theta 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC333691 representing NM_001293809. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTCCCTGTTTTCTGGGTGAGCCAGTATCTCCCCAGACACTGGCAGCCACCCTGGCAGAGTTGGAT
GTGACCCTGCAGTTGCTCGAGGACAAGTTCTCCAGAACAAGGCCTTCTTACTGGTCCTCACATCTCC
TTAGCTGACCTCGTAGCCATCACGGAGCTGATGCATCCCGTGGGTGCTGGCTGCCAAGTCTTGAAGGC
CGACCAAGCTGGCCACATGGCGGCAGCGCGTGGAGGCAGCAGTGGGGGAGGACCTTCCAGGAGGCC
CATGAGGTCATTCTGAAGCCAAGGACTTCCCACCTGCAGACCCACCATAAAGCAGAAGCTGATGCC
TGGGTGCTGGCCATGATCCGGTGA
ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites:	SgfI-MluI
ACCN:	NM_001293809
Insert Size:	369 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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).



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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_001293809.1](#)

RefSeq Size: 870 bp

RefSeq ORF: 369 bp

Locus ID: 2952

UniProt ID: [P30711](#)

Cytogenetics: 22q11.23

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

MW: 13.5 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]

Transcript Variant: This variant (4) lacks two alternate exons, resulting in an alternate 5' UTR and translation initiation at a downstream in-frame start codon, compared to variant 1. The encoded isoform (c) is shorter at the N-terminus, compared to isoform a. Variants 3, 4, 5, 6 and 7 all encode isoform c.