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# Product datasheet for RC235649

## Glutathione S Transferase theta 1 (GSTT1) (NM_001293813) Human Tagged ORF Clone

## Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Glutathione S Transferase theta 1 (GSTT1) (NM_001293813) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | Glutathione S Transferase theta 1 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

```
>RC235649 representing NM_001293813
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCTGGAGCTGTACCTGGACCTGCTGTCCCAGCCCTGCCGCGCTGTTTACATCTTTGCCAAGAAGA
ACGACATTCCCTTCGAGCTGCGCATCGTGGATCTGATTAAAGGTCAGCACTTAAGCGATGCCTTTGCCCA
GGTGAACCCCCTCAAGAAGGTGCCAGCCTTGAAGGACGGGGACTTCACCTTGACGGAGAGCCCGTGGGTG
CTGGCTGCCAAGTCTTCGAAGGCCGACCCAAGCTGGCCACATGGCGGCAGCGCGTGGAGGCAGCAGTGGG
GGAGGACCTCTTCCAGGAGGCCCATGAGGTCATTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

**Protein Sequence:**

```
>RC235649 representing NM_001293813
Red=Cloning site Green=Tags(s)

MGLELYLDLLSQPCRAVYIFAKKNDIPFELRIVDLIKGQHLSDAFAQVNPLKKVPALKDGDFTLTESPWV
LAAKSSKADPSWPHGGSAWRQQWGRTSSRRPMRSF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

**Restriction Sites:** SgfI-MluI

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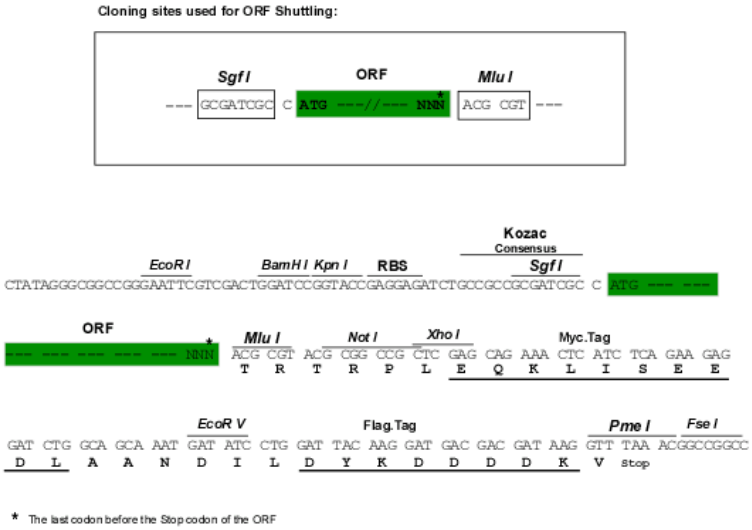
**Cloning Scheme:**




| | |
|---|---|
| **ACCN:** | NM_001293813 |
| **ORF Size:** | 315 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001293813.1, NP_001280742.1 |
| **RefSeq Size:** | 781 bp |

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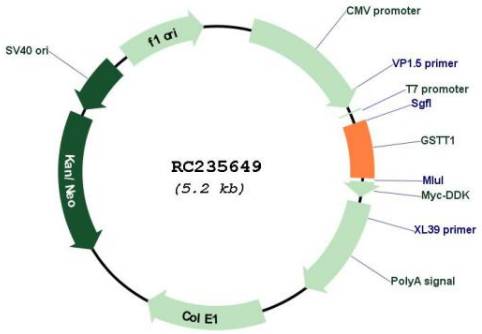
| | |
|---|---|
| **RefSeq ORF:** | 318 bp |
| **Locus ID:** | 2952 |
| **Cytogenetics:** | 22q11.23 |
| **Protein Pathways:** | Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450 |
| **MW:** | 12.3 kDa |
| **Gene Summary:** | The protein encoded by 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] |

## Product images:




Circular map for RC235649

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