

Product datasheet for RC202807

Glutathione S Transferase theta 1 (GSTT1) (NM_000853) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glutathione S Transferase theta 1 (GSTT1) (NM_000853) 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:	>RC202807 representing NM_000853 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGGCCTGGAGCTGTACCTGGACCTGCTGTCCAGCCCTGCCGCGCTGTTTACATCTTTGCCAAGAAGA
 ACGACATTCCTTCGAGCTGCGCATCGTGGATCTGATTAAAGGTCAGCACTTAAGCGATGCCTGTGCCCA
 GGTGAACCCCTCAAGAAGGTGCCAGCCTGAAGGACGGGGACTTCACCTTGACGGAGAGTGTGGCCATC
 CTGCTCTACCTGACGCGCAAATATAAGGTCCCTGACTACTGGTACCCTCAGGACCTGCAGGCCCGTGCCC
 GTGTGGATGAGTACCTGGCATGGCAGCACAGACTCTGCGGAGAAGCTGCCTCCGGCCTTGTGGCATAA
 GGTGATGTTCCCTGTTTTCTGGGTGAGCCAGTATCTCCCAGACACTGGCAGCCACCCTGGCAGAGTTG
 GATGTGACCTGCAGTTGCTCGAGGACAAGTTCCTCCAGAACAAGGCCTTCTTACTGGTCTCAGATCT
 CCTAGCTGACCTCGTAGCCATCACGGAGCTGATGCATCCCGTGGGTGCTGGCTGCCAAGTCTTCGAAGG
 CCGACCCAAGCTGGCCACATGGCGGCAGCGCTGGAGGCAGCAGTGGGGAGGACCTCTCCAGGAGGCC
 CATGAGGTCATTCTGAAGCCAAGGACTTCCACCTGCAGACCCACCATAAACAGAAGCTGATGCCCT
 GGGTGCTGGCCATGATCCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC202807 representing NM_000853
 Red=Cloning site Green=Tags(s)

MGLELYLDLLSQPCRAVYIFAKKNDIPFELRIVDLIKGQHLSDACAQVNPLKKVPALKDGDFTLTESVAI
 LLYLTRYKYKVPDYWPQDLQARARVDEYLAWQHHTLRRSCLRALWHKVMFPVFLGEPVSPQTLAATLAEL
 DVTQLLEDKFLQNKAFLTGPHISLADLVAITELMHPVGAGCQVFEGRPKLATWRQVEAAVGEDLFQEA
 HEVILKAKDFPPADPTIKQKLPWVLAMIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1487_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000853

ORF Size: 720 bp

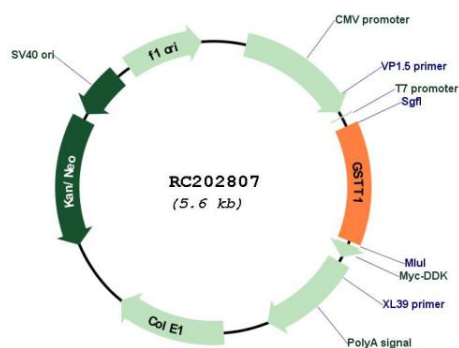
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

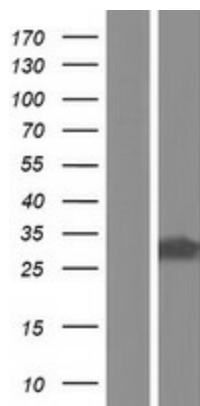
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	NM_000853.3
RefSeq Size:	1004 bp
RefSeq ORF:	723 bp
Locus ID:	2952
UniProt ID:	P30711
Cytogenetics:	22q11.23
Domains:	GST_N, GST_C
Protein Pathways:	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
MW:	27.2 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC202807



Western blot validation of overexpression lysate (Cat# [LY424484]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202807 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).