

Product datasheet for **RG236744**

Glutathione S Transferase theta 2 (GSTT2) (NM_001302670) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Glutathione S Transferase theta 2 (GSTT2) (NM_001302670) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: GSTT2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236744 representing NM_001302670.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCCTAGAGCTGTTTCTTGACCTGGTGTCCCAGCCAGCCGCGCCGTCTACATCTTCGCCAAGAAG
AATGGCATCCCCTTAGAGCTGCGCACCGTGGATTTGGTCAAAGGGCAGCACAAGAGCAAGGAGTTCTTG
CAGATCAACAGCCTGGGGAACTGCCGACGCTCAAGGATGGTGATTTTCATCTTGACCGAAAGCTCGGCC
ATCCTGATTTACCTGAGCTGTAAGTACCAGACGCCGACCACTGGTATCCATCTGACCTGCAGGCTCGT
GCCCGTGTTCATGAGTACCTGGGCTGGCATGCCGACTGCATCCGTGGCACCTTTGGTATACCCCTGTGG
GTCCAGGTGTTGGGGCCACTCATTGGGGTCCAGGTGCCAAGGAGAAGGTGGAACGCAACAGGACTGCC
ATGGACCAGCCCTGCAATGGCTGGAGGACAAGTTCCTGGGGGACAGGCCCTTCCTCGCTGGCCAGCAG
CCGGTGGCTCTCGGCTATGAAGTGGTGGAGGACGCCACGACTGGCAGCATGGCGTGGACGAGTGGAG
GCTTTCCTGGGTGCTGAGCTATGCCAGGAGGCCACAGCATCATCTTGAGCATCCTGGAACAGGCGGCC
AAGAAAACCTCCCAACACCCTACCAGAGGCCTATCAGGCTATGCTGCTCGAATCGCCAGGATCCCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236744
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MGLELFLDLVSQPSRAVYIFAKKNGIPELRLTVDLVKGQHKSKFLQINSLGKPLTKDGFILTESSA
ILIYLSCKYQTPDHWPSDLQARARVHEYLGWHADCIKRGTFGIPLWVQVLGPLIGVQVPKEKVERNRTA
MDQALQWLEDKFLGDRPFLAGQQPVALGYELFEGRPRLAAWRGRVEAFLGAELCQEAHSIILSILEQAA
KKTLPTPSPEAYQAMLLRIARIP
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRFSLRDGGYSSVVDSHMHFKSAIHPISILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERY
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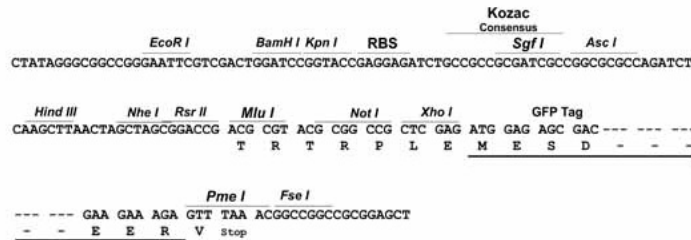
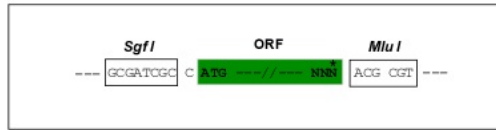


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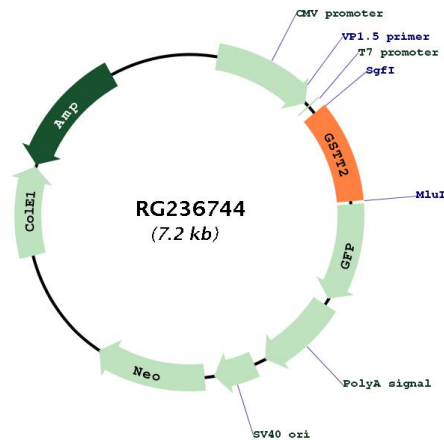
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001302670

ORF Size: 690 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).
RefSeq:	NM_001302670.1 , NP_001289599.1
RefSeq Size:	1189 bp
RefSeq ORF:	693 bp
Locus ID:	2953
Cytogenetics:	22q11.23
Protein Pathways:	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450
MW:	26.4 kDa
Gene Summary:	The protein encoded by this gene, glutathione S-transferase (GST) theta 2 (GSTT2), 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. GSTT2 and GSTT2B are nearly identical to each other, and share 55% amino acid identity with GSTT1. All three genes may play a role in human carcinogenesis. The GSTT2 gene is a pseudogene in some populations. [provided by RefSeq, Sep 2015]