

Product datasheet for RC236744

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: Myc-DDK
Symbol: Glutathione S Transferase theta 2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC236744 representing NM_001302670
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGCCTAGAGCTGTTTCTTGACCTGGTGTCCCAGCCCAGCCGCGCGTCTACATCTTCGCCAAGAAGA
 ATGGCATCCCCCTAGAGCTGCGCACCGTGGATTTGGTCAAAGGGCAGCACAAGAGCAAGGAGTCTTGCA
 GATCAACAGCCTGGGAAACTGCCGACGCTCAAGGATGGTGATTCATCTTGACCGAAAGCTCGGCCATC
 CTGATTTACCTGAGCTGTAAGTACCAGACGCGCCGACCATTGGTATCCATCTGACCTGCAGGCTCGTGCC
 GTGTTTCATGAGTACCTGGGCTGGCATGCCGATGCCATCCGTTGGCACCTTTGGTATACCCCTGTGGTCCA
 GGTTTGGGGCCACTCATTGGGGTCCAGGTGCCCAAGGAGAAGGTGGAACGCAACAGGACTGCCATGGAC
 CAGGCCCTGCAATGGCTGGAGGACAAGTTCCTGGGGACAGGCCCTTCTCGCTGGCCAGCAGCCGGTGG
 CTCTCGGCTATGAACTGTTTGGGGACGGCCACGACTGGCAGCATGGCGTGGACGAGTGGAGGCTTCTCT
 GGGTGCTGAGCTATGCCAGGAGGCCACAGCATCATCTTGAGCATCCTGGAACAGGCGGCCAAGAAAACC
 CTCCCAACACCCTACCAGAGGCCTATCAGGCTATGCTGCTTGAATCGCCAGGATCCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236744 representing NM_001302670
 Red=Cloning site Green=Tags(s)

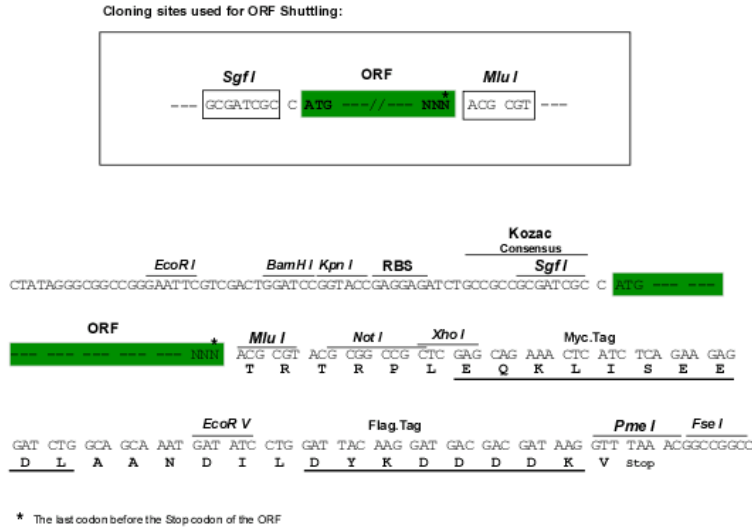
MGLELFLDLVSQPSRAVYIFAKKNGIPELRLTVDLVKGQHKSKFLQINSLGKLPTLKDGFILTESSAI
 LIYLSCKYQTPDHWYPSDLQARARVHEYLGWHADCIKRGTFGIPLWVQVLGPLIGVQVPKEKVERNRTAMD
 QALQWLEDKFLGDRPFLAGQQPVALGYELFEGRPRLAAWRGRVEAFLGAELCQEHSIILSILEQAAKKT
 LPTPSPEAYQAMLLRIARIP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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_001302670.1](#), [NP_001289599.1](#)

RefSeq Size: 1189 bp

RefSeq ORF: 693 bp

Locus ID: 2953

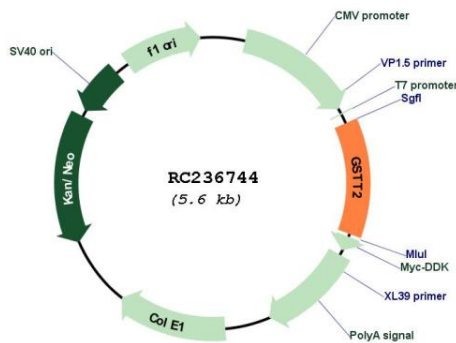
Cytogenetics: 22q11.23

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]

Product images:



Circular map for RC236744