

Product datasheet for **RC223332**

GSTM1 (NM_000561) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GSTM1 (NM_000561) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GSTM1
Synonyms:	GST1; GSTM1-1; GSTM1a-1a; GSTM1b-1b; GTH4; GTM1; H-B; MU; MU-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223332 representing NM_000561 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCATGATACTGGGGTACTGGGACATCCGCGGGCTGGCCACGCCATCCGCCTGCTCCTGGAATACA
CAGACTCAAGCTATGAGGAAAAGAAGTACACGATGGGGGACGCTCCTGATTATGACAGAAGCCAGTGGCT
GAATGAAAAATCAAGCTGGCCTGGACTTTCCCAATCTGCCCTACTTGATTGATGGGGCTCACAAGATC
ACCCAGAGCAACGCCATCTTGCTACATTGCCGCAAGCACAACCTGTGTGGGAGACAGAAGAGGAGA
AGATTCGTGTGGACATTTGGAGAACCAGACCATGGACAACCATATGCAGCTGGGCATGATCTGCTACAA
TCCAGAATTTGAGAACTGAAGCCAAAGTACTTGAGGAACTCCCTGAAAAGCTAAAGCTCTACTCAGAG
TTTCTGGGGAAGCGCCATGGTTTGAGGAAACAAGATCACTTTTGTAGATTTTCTCGTCTATGATGTCC
TTGACCTCCACCGTATATTTGAGCCCAAGTGCTTGAGCGCTTCCCAAATCTGAAGGACTTCATCTCCC
CTTTGAGGGCTTGAGAAGATCTCTGCCTACATGAAGTCCAGCGCTTCTCCCAAGACCTGTGTTCTCA
AAGATGGCTGTCTGGGCAACAAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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_000561.4](#)

RefSeq Size: 1161 bp

RefSeq ORF: 657 bp

Locus ID: 2944

UniProt ID: [P09488](#)

Cytogenetics: 1p13.3

Domains: GST_N, GST_C

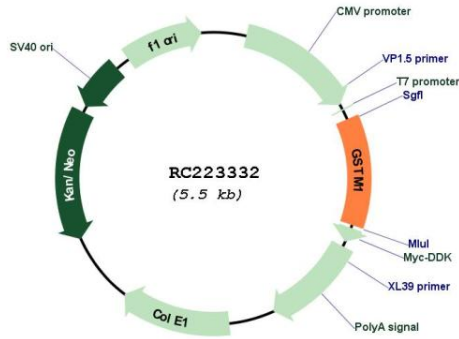
Protein Families: Druggable Genome

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

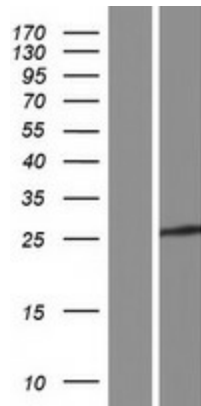
MW: 25.5 kDa

Gene Summary: Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. This gene encodes a glutathione S-transferase that belongs to the mu class. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and are known to be highly polymorphic. These genetic variations can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Null mutations of this class mu gene have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC223332



Western blot validation of overexpression lysate (Cat# [LY424640]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223332 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).