

Product datasheet for **MG213605**

Mgst2 (NM_174995) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mgst2 (NM_174995) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Mgst2
Synonyms: GST2; MGST-II
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG213605 representing NM_174995
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGGGATTCAAGCCTGCTGGCTGCAGTCTCTTCTCTCTGCCTGTCAGCAAAGTATTTTCGCTT
GGCGGGTCGGACGAGCAAGACTAAAACACAAGATTGCACCCCCAGCAGTCACGGGCCCTCTGGAATTCGA
GAGAATATTTCTGCACAGCAAACTCTTTGGAGTTTTATCCTGTATTCATCGTAATGCTGTGGATGGCT
GGGTGGTACTTCAATCAAGTTTTGCAGCCTGTCTGGGTCTCCTGTACATATACGCCCGTCACAAGTATT
TCTGGGGCTATGCCGAGCCGCTGAGAAAAGGATCACCGGTTTCCGACTGAGCCTGGGGATTTGACCTT
GCTGCCTGCTCCTCGCTGTCTGGGGTAGCAAGCAGATTCTGAACGAATACCTGGACTTTCATGTTGCC
AAGAAACTGAGGAAGCCCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG213605 representing NM_174995
Red=Cloning site Green=Tags(s)

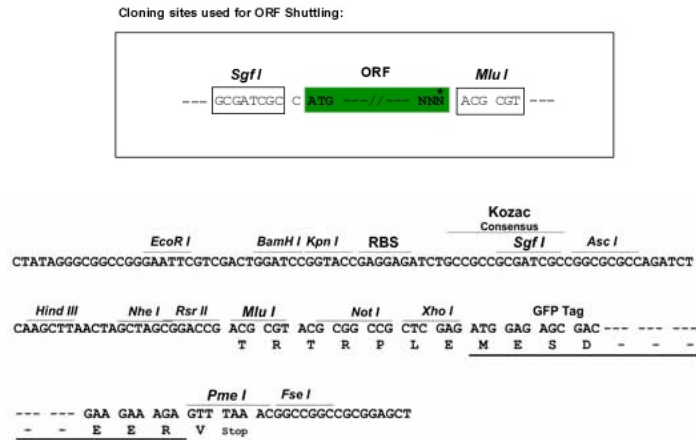
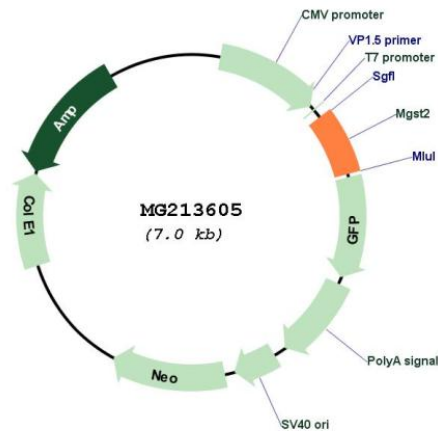
MAGDSSLLAAVSLLSACQQSYFAWRVGRARLKHKIAPPAVTGPLEFERIFRAQQNSLEFYVPVIVMLWMA
GWYFNQVFAACLGLLYIYARHKYFWGYAEEAEKRITGFRLSLGILTLPLVAVLGVASRFLNEYLDHFVA
KKLRKPF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:

Plasmid Map:


ACCN: NM_174995

ORF Size: 441 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:	<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:	<u>NM_174995.3, NP_778160.2</u>
RefSeq Size:	593 bp
RefSeq ORF:	444 bp
Locus ID:	211666
UniProt ID:	<u>A2RST1</u>
Cytogenetics:	3 C
Gene Summary:	Catalyzes several different glutathione-dependent reactions. Catalyzes the glutathione-dependent reduction of lipid hydroperoxides, such as 5-HPETE. Has glutathione transferase activity, toward xenobiotic electrophiles, such as 1-chloro-2, 4-dinitrobenzene (CDNB). Catalyzes also the conjugation of leukotriene A4 with reduced glutathione to form leukotriene C4 (LTC4) (By similarity). Involved in oxidative DNA damage induced by ER stress and anticancer agents by activating LTC4 biosynthetic machinery in nonimmune cells (PubMed:26656251).[UniProtKB/Swiss-Prot Function]