

Product datasheet for MR202575

Gsta1 (NM_008181) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gsta1 (NM_008181) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gsta1
Synonyms:	Gst2-1; OTTMUSG00000031890
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202575 representing NM_008181 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGGAAGCCCGTGCTTCACTACTTCAATGCCCGGGCAGAATGGAGTGCATCAGGTGGCTCCTGG
CTGCAGCAGGGGTGGAGTTTGAAGAGAAGTTTATACAGAGTCCGGAAGATTTGAAAAGCTAAAAAAGA
TGGGAATTTGATGTTGACCAAGTGCCCATGGTGGAGATTGATGGGATGAAGCTGGCGCAGACCAGAGCC
ATTCTCAACTACATCGCCACCAATATGACCTCTATGGGAAGGACATGAAGGAGAGGCCCTGATTGACA
TGTATTCAGAAGTATTTAGATCTGACTGAAATGATTGGCAATTGGTATTATGTCCCCAGACCAAAG
AGAAGCCAAGACTGCCTTGGCAAAAGATAGGACCAAAAACCGTTACTTGCCTGCCTTTGAAAAGGTGTTG
AAGAGCCATGGACAAGACTACCTTGTGGCAACAGGCTGACCAGGGTGGACATCCACCTACTGGAAGTTC
TCCTCTATGTTGAAGAGTTTGTGCCAGCCTTCTGACCCCTTTCCTCTGCTGAAGGCCTTCAAGAGCAG
AATCAGCAGCCTCCCAATGTGAAGAAGTTCCTACAGCCTGGCAGCCAGAGAAAGCCTCCCATGGATGCA
AAACAAATTCAGAAGCAAGGAAGGCTTCAAGATTCAG

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR202575 representing NM_008181
Red=Cloning site Green=Tags(s)

MAGKPVLYHFNARGRMECIRWLLAAAGVEFEKFIQSPEDLEKLLKKGDNLMFDQVPMVEIDGMKLAQTRA
 ILNYIATKYDLYGKDMKERALIDMYSEGILDLTEMIGQLVLCPPDQREAKTALAKDRTKNRYLPFAFEKVL
 KSHGQDYLVGNRLTRVDIHLLEVLVYEEFDASLLTPFPLLKAFKSRISLPLNVKFLQPGSQRKPMDA
 KQIQEARKAFKIQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9043_e04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008181

ORF Size: 669 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_008181.3](#), [NP_032207.3](#)

RefSeq Size: 861 bp

RefSeq ORF: 672 bp

Locus ID: 14857

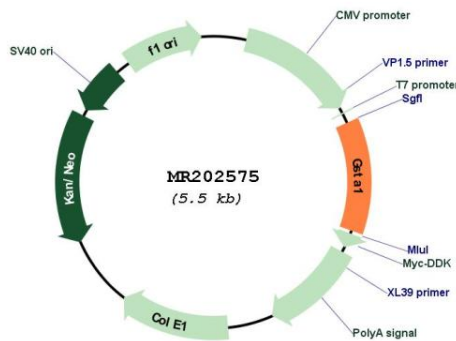
UniProt ID: [P13745](#)

Cytogenetics: 9 43.65 cM

MW: 26.1 kDa

Gene Summary: Glutathione S-transferase that catalyzes the nucleophilic attack of the sulfur atom of glutathione on the electrophilic groups of a wide range of exogenous and endogenous compounds (Probable). Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2). It also catalyzes the isomerization of D5-androstene-3,17-dione (AD) into D4-androstene-3,17-dione and may therefore play an important role in hormone biosynthesis. Through its glutathione-dependent peroxidase activity toward the fatty acid hydroperoxide (13S)-hydroperoxy-(9Z,11E)-octadecadienoate/13-HPODE it is also involved in the metabolism of oxidized linoleic acid (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202575