

## Product datasheet for **MG208024**

### **Gsr (NM\_010344) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gsr (NM_010344) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gsr
Synonyms:	AI325518; D8Ertd238e; Gr-1; Gr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG208024 representing NM\_010344  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGCTGCTGCCCGGGCGCTGGGCGTGGGCGCGGCCCGAGCCTGCGGCGGGCAGCGCGCGCTCA  
 CCTGCGCCATGGCGAGTCCCGGGGAGCCGAGCCCGGCCCGGACACCTCTTCCTTCGACTACCTGGT  
 GATCGGGCGGGCTCCGGCGGGCTGGCCAGCGCGCGGGCGGGGAGCTCGGGCCAGGGCCGCGGTG  
 GTGGAGAGTCACAAGCTGGTGGCACTTGCCTGAATGTTGGATGTGTACCCAAAAAGGTAATGTGGAACA  
 CAGCAGTGCCTCGAATTCATGCACGATCACGTGGATTACGGCTTTCAAAGCTGTGAGGGTAAATTCAG  
 TTGGCATGTCATCAAGCAGAAAAGGGATGCCTATGTGAGCCGCCTGAACACCATCTATCAAATAATTTA  
 ACCAAGTCTCACATAGAAATTATCCACGGCTATGCAACATTTCGAGATGGTCTCGGCCACGGTGAAG  
 TCAATGGGAAAAAGTTTACCGCTCCACACATCCTGATTGCCACAGGAGGGTGGCCACAGTTCTCAGCA  
 GAGCCAGATCCCAGGCGCCAGCCTGGGGATCACCAGTGTGGCTTCTTTAGCTGGAGGACTTGCCAGC  
 CGCAGCGTCATCGTGGGGCCGGGTACATTGCTGTGGAGATCGCGGGCATTCTCTGCCCCTGGGCTCCA  
 AGACATCTCTTATGATCAGGCATGATAAGTACTGAGAAATTTGATTCACTCATCAGTTCCAACCTGCAC  
 CGAGGAATGGAGATGCCGGCGTGGAGGTGTTGAAGTTCACACAGGTTAAGGAAGTAAAAAGACATCA  
 TCAGGCCCTGGAGCTCAAAGTGGTGAATCCGTGCCTGGTGAAGGCCACCACGACCATGATTCCAGATG  
 TTGACTGCCTGCTCTGGGCCATTGGACGGGACCAAATTTAAGGGCCTGAATCTGAATAAAGTGGGCAT  
 TCAGACGGATGAAAAGGGCCACATCCTAGTAGACGAATCCAGAATACCAATGTCAAAGGCGTCTATGCT  
 GTGGGAGACGCTGTGGGAAAGCGCTTCTACCCAGTTGCAATCGCTGTGGCCGAAACTTGCCCATAG  
 GACTGTTGAATGCAACAAGATTCCAAATAGACTATGACAACATCCCTACTGTGGTCTTCAGCCACCC  
 CCTATTGGGACCGTGGGGCTCACTGAAGACGAAGCTGTTTATAAGTATGGGAAAGACAATGTGAAAATC  
 TACTCGACTGCCTTTACCCGATGTATCAGCTGTGACCACGAGGAAGACGAAATGCGTCATGAAGATGG  
 TTTGTGCCAACAAAGAGGAAAAGGTGGTTGGCATTACATGCAGGGGATTGGCTGTGATGAGATGCTGCA  
 GGGCTTCGCTGTAGCGGTGAAAATGGGGGCCACCAAGGCCGACTTCGACAACACAGTTGCCATTCATCT  
 ACCTCTTCAGAGGAGCTGGTCACCCTGCGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG208024 representing NM\_010344  
 Red=Cloning site Green=Tags(s)

MALLPRALGVGAAPSLRRAARALTCAMASPGEPQPPAPDTSSFDYLVIGGGSGGLASARRAAELGARA  
 AVESHKLGGTVCNVGCVPKKVMWNTAVHSEFMHDHVDYGFQSCGKFSWHVIKQKRDAYVSRNLNTIYQNNL  
 TKSHIEIIHGYATFADGPRPTVEVNGKKFTAPHIL IATGGVPTVPHESEQIPGASLGITSDGFFQLEDLPS  
 RSVIVGAGYIAVEIAGILSALGSKTSLMIRHDKVLRNFDLSISSNCTEELNAGVEVLKFTQVKEVKKTS  
 SGLELQVVTSVPGRKPPTTMI PDVDCLLWAI GRDPNSKGLNLNKVG IQTDEKGHILVDEFQNTNVKGVYA  
 VGDVCGKALLTPVAIAAGRKLAHRLFECKQD SKLDYDNIPTVVF SHPPIGTVGLTEDEAVHKYKDNVKI  
 YSTAFTPMYHAVTTRKTKCVMKMCANKEEKVVG IHMQIGCDEMLQGF AVAVKMGATKADFNTVAIHP  
 TSSEELVTLR

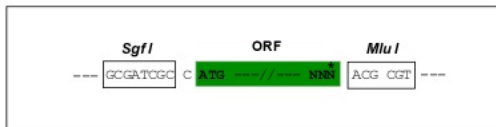
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



*EcoRI*
*BamHI* *KpnI*
RBS
Kozac  
Consensus
*SgfI*
*AscI*

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

*HindIII*
*NheI* *RsrII*
*MluI*
*NotI*
*XhoI*
GFP Tag

CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

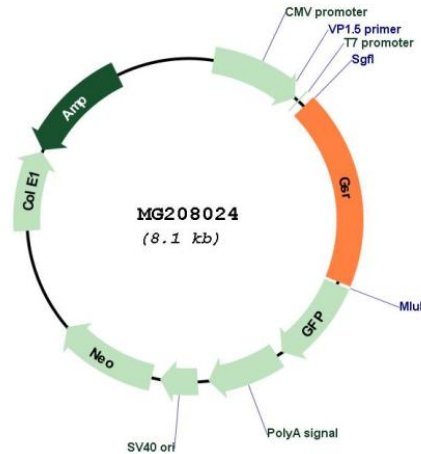
T R T R P L E
M E S D - - -

*PmeI*
*FseI*

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

Plasmid Map:



ACCN: NM\_010344

ORF Size: 1500 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\\_010344.4](#), [NP\\_034474.4](#)

**RefSeq Size:** 2692 bp

**RefSeq ORF:** 1503 bp

**Locus ID:** 14782

**UniProt ID:** [P47791](#)

**Cytogenetics:** 8 20.69 cM

**Gene Summary:** Maintains high levels of reduced glutathione in the cytosol.[UniProtKB/Swiss-Prot Function]