

## Product datasheet for **RG207428**

### Glutathione Peroxidase 7 (GPX7) (NM\_015696) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Glutathione Peroxidase 7 (GPX7) (NM\_015696) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Glutathione Peroxidase 7  
**Synonyms:** CL683; GPx-7; GPX6; GSHPx-7; NPGPx  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG207428 representing NM\_015696  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGGCGGCGACGGTGGCAGCGCGTGGCTGCTCCTGTGGGCTGCGGCCTGCGCGCAGCAGGAGCAGG  
 ACTTCTACGACTCAAGGCGGTCAACATCCGGGGCAAACGGTGTGCTGGAGAAGTACCGCGGATCGGT  
 GTCCTGGTGGTGAATGTGGCCAGCGAGTGGGCTTACAGACCAGCACTACCGAGCCCTGCAGCAGCTG  
 CAGCGAGACCTGGGCCCCACCCTTCAACGTGCTCGCCTTCCCCTGCAACCAGTTGGCCAACAGGAGC  
 CTGACAGCAACAAGGAGATTGAGAGCTTGCCTCCCGCACCTACAGTGTCTCATTCCCCATGTTTAGCAA  
 GATTGCAGTCACCGGACTGGTGGCCATCCTGCCTTCAAGTACCTGGCCAGACTTCTGGGAAGGAGCCC  
 ACCTGGAACCTTCTGGAAGTACCTAGTAGCCCCAGATGGAAGGTGGTAGGGCTTGGGACCAACTGTGT  
 CAGTGGAGGAGGTGAGACCCAGATCACAGCGCTCGTGAGGAAGTCTATCCTACTGAAGCGAGAAGACT  
 A

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG207428 representing NM\_015696  
 Red=Cloning site Green=Tags(s)

MVAATVAAAWLLLWAAACAQQEQDFYDFKAVNIRGKLVLSLEKYRGSVSLVNVASECGFTDQHYRALQQL  
 QRDLGPHHFNVLAFCNQFGQQEPDSNKEIESFARRTYSVSFPMFSKIAVTGTGAHPAFKYLAQTSKPEP  
 TWNFWKYLVA PDGKVVGAWDPTVSVVEVRPQITALVRKLI LLKREDL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_015696

**ORF Size:** 561 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

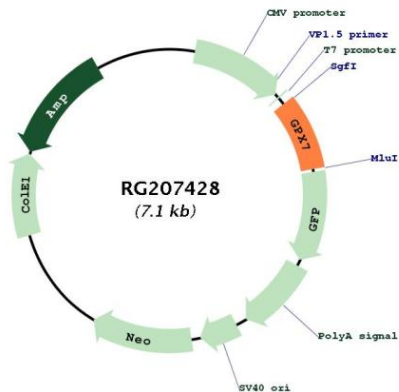
**Reconstitution Method:**

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\\_015696.2](#), [NP\\_056511.2](#)

RefSeq Size:	1228 bp
RefSeq ORF:	564 bp
Locus ID:	2882
UniProt ID:	<a href="#">Q96SL4</a>
Cytogenetics:	1p32.3
Domains:	GSHPx
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Arachidonic acid metabolism, Glutathione metabolism
Gene Summary:	It protects esophageal epithelia from hydrogen peroxide-induced oxidative stress. It suppresses acidic bile acid-induced reactive oxygen species (ROS) and protects against oxidative DNA damage and double-strand breaks.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG207428