

Product datasheet for **RG222179**

GPX5 (NM_003996) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GPX5
Synonyms:	EGLP; GPx-5; GSHPx-5; HEL-S-75p
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG222179 representing NM_003996
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTACACAGTTAAGGGTCGTCCATCTGCTTCCCCTTCTCTAGCCTGCTTTGTGCAAAACAAGTCCCA
AGCAGGAGAAGATGAAGATGGATTGCCACAAAGACGAGAAAGGCACCATCTATGACTATGAGGCCATCGC
ACTTAATAAGAATGAATATGTTTCCTTCAAGCAGTATGTGGCAAGCACATCCTCTTCGTCAACGTGGCC
ACCTACTGTGGTCTGACAGCGCAATATCCTGGTATGTCCGTCCAGGGGGAGGATTTGTACCTAGTTTCCA
GCTTTTGTAGAAAGGGGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222179 representing NM_003996
Red=Cloning site Green=Tags(s)

MTTQLRVVHLLPLLLACFVQTSPPQEKMKMDCHKDEKGTIYDYEIALNKNEYVSFKQYVVGKHLFVNVA
TYCGLTAQYPGMSVQGEDLYLVSSFLRKGM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:



ACCN: NM_003996

ORF Size: 300 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 or by calling 301.340.3188 option 3 for pricing and delivery.

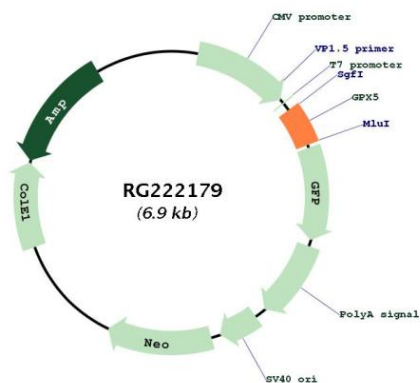
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_003996.3, NP_003987.2</u>
RefSeq Size:	1334 bp
RefSeq ORF:	303 bp
Locus ID:	2880
UniProt ID:	<u>O75715</u>
Cytogenetics:	6p22.1
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Arachidonic acid metabolism, Glutathione metabolism
Gene Summary:	This gene belongs to the glutathione peroxidase family. It is specifically expressed in the epididymis in the mammalian male reproductive tract, and is androgen-regulated. Unlike several other characterized glutathione peroxidases, this enzyme is not a selenoprotein, lacking the selenocysteine residue. Thus, it is selenium-independent, and has been proposed to play a role in protecting the membranes of spermatozoa from the damaging effects of lipid peroxidation and/or preventing premature acrosome reaction. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Oct 2016]

Product images:



Circular map for RG222179