

Product datasheet for **RC222179**

GPX5 (NM_003996) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GPX5 (NM_003996) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GPX5
Synonyms: EGLP; GPx-5; GSHPx-5; HEL-S-75p
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC222179 representing NM_003996
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGACTACACAGTTAAGGGTCGTCATCTGCTTCCCTTCTCCTAGCCTGCTTTGTGCAAACAAGTCCCA
AGCAGGAGAAGATGAAGATGGATTGCCACAAAGACGAGAAAGGCACCATCTATGACTATGAGGCCATCGC
ACTTAATAAGAATGAATATGTTTCCTTCAAGCAGTATGTGGCAAGCACATCCTTTCGTC AACGTGGCC
ACCTACTGTGGTCTGACAGCGCAATATCCTGGTATGTCCGTCCAGGGGGAGGATTTGTACCTAGTTTCCA
GCTTTTTGAGAAAGGGATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222179 representing NM_003996
Red=Cloning site Green=Tags(s)

MTTQLRVHLLPLLLACFVQTSKQEKMKMDCHKDEKGTIYDYEIALNKNEYVSFKQYVKGHILFVNVA
TYCGLTAQYPGMSVQGEDLYLVSSFLRKGM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

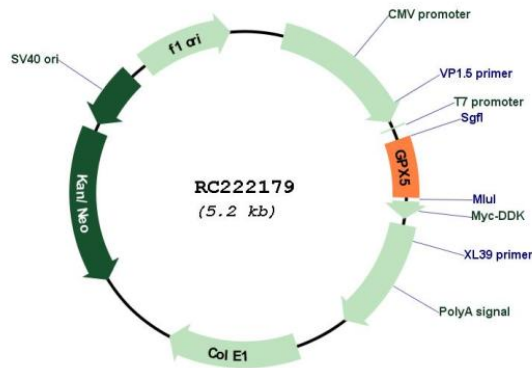


[View online »](#)

Cloning Scheme:



Plasmid Map:



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.

RefSeq: [NM_003996.3](#), [NP_003987.2](#)

RefSeq Size: 1334 bp

RefSeq ORF: 303 bp

Locus ID: 2880

UniProt ID: [O75715](#)

Cytogenetics: 6p22.1

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Arachidonic acid metabolism, Glutathione metabolism

MW: 11.4 kDa

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]