

Product datasheet for **RG220321**

GPX5 (NM_001509) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPX5 (NM_001509) Human Tagged ORF Clone
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:	>RG220321 representing NM_001509 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTACACAGTTAAGGGTCGTCCATCTGCTTCCCTTCTCCTAGCCTGCTTTGTGCAACAAGTCCCA
AGCAGGAGAAGATGAAGATGGATTGCCACAAAGACGAGAAAGGCACCATCTATGACTATGAGGCCATCGC
ACTTAATAAGAATGAATATGTTTCCTTCAAGCAGTATGTGGCAAGCACATCCTCTCGTCAACGTGGCC
ACCTACTGTGGTCTGACAGCGCAATATCCTGAACTAAATGCACTCCAGGAGGAGCTGAAGCCCTATGGTC
TAGTTGTGTTGGCTTTCCCTGCAACCAATTTGAAAAGCAAGAACCAGGAGATAACAAGAGATTCTTCC
TGGGCTCAAGTATGTCCGTCCAGGGGAGGATTTGTACCTAGTTTCCAGCTTTTTGAGAAAGGGGATGTG
AATGGTAAAAAAGAACAGAAAGTCTTCAGTTTCTGAAGCACTCCTGTCCCTCATCCCTCTGAGATTTTGG
GCACATTCAAATCTATATCCTGGGACCCTGTAAAGGTCCATGACATCCGTTGAACTTTGAAAAGTTCTT
GGTGGGGCCTGATGGAATCCCTGTATGCGCTGGTCCCACCGGGCTACGGTCAGCTCAGTCAAGACAGAC
ATCCTGGCGTACTTGAAGCAATTCAAAACCAA

ACGCGTACGCGGGCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG220321 representing NM_001509
 Red=Cloning site Green=Tags(s)

MTTQLRVVHLLPLLLACFVQTSFKQEKMKMDCHKDEKGTIYDYEIALNKNEYVSFKQYVGGKHLFVNVA
 TYCGLTAQYPELNALQEELKPYGLVVLGFPCNQFGKQEPGDNKEILPGLKYVRPGGGFVPSFQLFEKGDV
 NGEKEQKVFSLKHSCPHPSEILGTFKSI SWDPVKVHDIRWNFEKFLVGPDPGIPVMRWSHRATVSSVKTD
 ILAYLKQFKTK

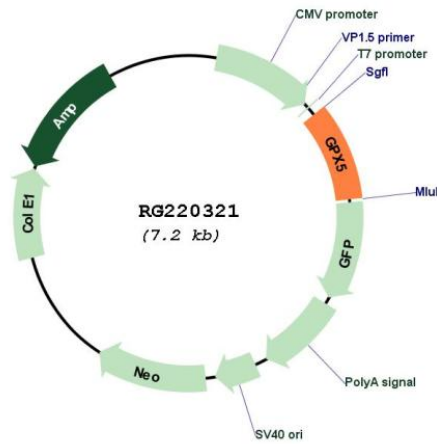
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001509

ORF Size: 663 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:	<ol style="list-style-type: none">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_001509.3
RefSeq Size:	668 bp
RefSeq ORF:	666 bp
Locus ID:	2880
UniProt ID:	Q75715
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]