

Product datasheet for **RG217362**

Peroxiredoxin 5 (PRDX5) (NM_181652) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Peroxiredoxin 5 (PRDX5) (NM_181652) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PRDX5
Synonyms: ACR1; AOEB166; B166; HEL-S-55; PLP; PMP20; PRDX6; prx-V; PRXV; SBB110
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG217362 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGACTAGCTGGCGTGTGCGCCCTGAGACGCTCAGCGGGCTATATACTCGTCGGTGGGCGCGGGT
 AGTCTGCGGCAGCGGCAGCAAGACGGTGCAGTGAAGGAGAGTGGCGCTCTGGCGGGTCCGCAGTTTCAG
 CAGAGCCGCTGCAGCCATGGCCCAATCAAGGTTCCGCTCCTGGCTGATCCACTGGGCGCTTTGGGAAG
 GAGACAGACTTACTAGATGATTCGCTGGTGTCCATCTTTGGGAATCGACGTCTCAAGAGTTCTCCA
 TGGTGGTACAGGATGGCATAAGTGAAGGCCCTGAATGTGGAACCAGATGGCACAGGCTCACCTGCAGCCT
 GGCACCAATATCATCTCACAGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217362 protein sequence
 Red=Cloning site Green=Tags(s)

MGLAGVICALRRSAGYILVGGAGGQSAAAAARRCSEGEWASGGVRSFSRAAAAMAPIKVRLADPTGAFGK
 ETDLLDDSLVSI FGNRR LKRFSMVVQDGIVKALNVEPDGTGLTCSLAPNIISQL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

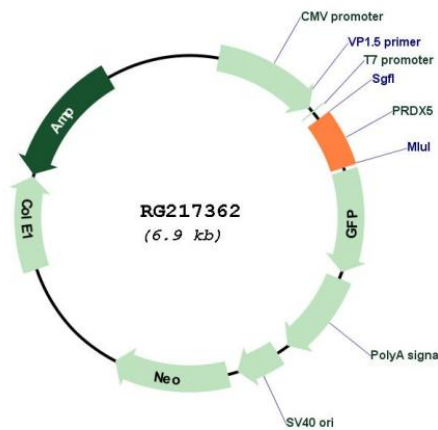


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Cloning Scheme:



Plasmid Map:



ACCN: NM_181652

ORF Size: 375 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_181652.2 , NP_857635.1
RefSeq Size:	646 bp
RefSeq ORF:	378 bp
Locus ID:	25824
UniProt ID:	P30044
Cytogenetics:	11q13.1
Protein Families:	Druggable Genome
MW:	12.8 kDa
Gene Summary:	This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein interacts with peroxisome receptor 1 and plays an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. The use of alternate transcription start sites is thought to result in transcript variants that use different in-frame translational start codons to generate isoforms that are targeted to the mitochondrion (isoform L) or peroxisome/cytoplasm (isoform S). Multiple related pseudogenes have been defined for this gene. [provided by RefSeq, Nov 2017]