

Product datasheet for **RG205072**

Peroxiredoxin 1 (PRDX1) (NM_181697) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Peroxiredoxin 1 (PRDX1) (NM_181697) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Peroxiredoxin 1
Synonyms: MSP23; NKEF-A; NKEFA; PAG; PAGA; PAGB; PRX1; PRXI; TDPX2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG205072 representing NM_181697
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCTTCAGGAAATGCTAAAATTGGGCACCCTGCCCAACTTCAAAGCCACAGCTGTTATGCCAGATG
 GTCAGTTTAAAGATATCAGCCTGTCTGACTACAAAGGAAAATATGTTGTGTTCTTCTTTACCCTTTGA
 CTTACCTTTGTGTGCCACGGAGATCATTGCTTTCAGTGATAGGCCAGAAGAATTTAAGAACTCAAC
 TGCCAAGTGATTGGTCTTCTGTGGATTCTCACTTCTGTCATCTAGCATGGTCAATACACCTAAGAAAC
 AAGGAGGACTGGGACCCATGAACATTCCTTTGGTATCAGACCCGAAGCGCACCATTGCTCAGGATTATGG
 GGTCTTAAAGGCTGATGAAGGCATCTCGTTCAGGGCCTTTTTATCATTGATGATAAGGGTATTCTCGG
 CAGATCACTGAAATGACCTCCCTGTTGGCCGCTCTGTGGATGAGACTTTGAGACTAGTTCAGGCCTTCC
 AGTTCACTGACAAACATGGGGAAGTGTGCCAGCTGGCTGAAACCTGGCAGTGATACCATCAAGCCTGA
 GTCCAAAAGAGCAAAGAATATTCTCCAAGCAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205072 representing NM_181697
 Red=Cloning site Green=Tags(s)

MSSGNAKIGHAPNFKATAVMPDQGFKDISLSDYKGYVVFYPLDFTFVCPTIIFSDRAEEFKLN
 CQVIGASVDSHFCHLAWVNTPKKQGLGPMNIPLVSDPKRTIAQDYGVKKADEGISFRGLFIIDDKGILR
 QITVNDLPVGRSVDLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_181697

ORF Size: 597 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_181697.3](#)

RefSeq Size: 1042 bp
 RefSeq ORF: 600 bp
 Locus ID: 5052
 UniProt ID: [Q06830](#)
 Cytogenetics: 1p34.1

Gene Summary: This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. Four transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jan 2011]

Product images:



Circular map for RG205072