

## Product datasheet for **RG203330**

### Peroxiredoxin 4 (PRDX4) (NM\_006406) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Peroxiredoxin 4 (PRDX4) (NM_006406) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Peroxiredoxin 4
Synonyms:	AOE37-2; AOE372; HEL-S-97n; PRX-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203330 representing NM_006406 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGCGCTGCCGCTGCTAGCCGCGACAACCCGGACCACGGCCGCCACCGAAGGCTGCTTCTGCTGC  
CGCTACTGCTGTTCTGCTGCCGGCTGGAGCTGTGCAGGGCTGGGAGACAGAGGAGAGGCCCGGACTCG  
CGAAGAGGAGTGCCACTTCTACGCGGTGGACAAGTGTACCCGGGAGAGGCATCCCGGTATCGGTCCG  
GACCACTCCCTGCACCTAAGCAAAGCGAAGATTTCCAAGCCAGCGCCCTACTGGGAAGGAACAGCTGTGA  
TCGATGGAGAATTTAAGGAGCTGAAGTTAACTGATTATCGTGGGAAATACTTGGTTTTCTTTCTACCC  
ACTTGATTTACATTTGTGTGTCCAACCTGAAATATCGCTTTTGGCGACAGACTTGAAGAATTCAGATCT  
ATAAACTGAAGTGGTAGCATGCTCTGTTGATTCACAGTTTACCCATTTGGCCTGGATTAATACCCCTC  
GAAGACAAGGAGGACTTGGGCCAATAAGGATTCACCTTCTTTAGATTTGACCCATCAGATCTCAAAGGA  
CTATGGTGTATACCTAGAGGACTCAGGCCACACTCTTAGAGGTCTTTCATTATTGATGACAAAGGAATC  
CTAAGACAAATTAAGTGAATGATCTTCTGTGGGTAGATCAGTGGATGAGACACTACGTTTGGTTCAAG  
CATTCCAGTACACTGACAAACACGGAGAAGTCTGCCCTGCTGGCTGGAACCTGGTAGTAAACAATAAT  
CCCAGATCCAGCTGGAAGCTGAAGTATTTGATAAACTGAAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG203330 representing NM\_006406  
 Red=Cloning site Green=Tags(s)

MEALPLLAATTPDHGRHRRLLLLPLLLFLLPAGAVQGWETEERPRTREEECHFYAGGQVYPGEASRVSVADHSLHLSKAKISKAPYWEGTAVIDGEFKELKLDYRGKYLVFFFYPLDFTFVCPTEIIAFGDRLEEFRSINTEVVACSVDSQFTHLAWINTPRRQGLGPIRIPLLSDLTHQISKDYGVYLED SGHTLRGLFIIDDKGILRQITLNDLPVGRSVDETLRLVQAFQYTDKHGEVCPAGWKPGSETIIPDPAGKLYFDKLN

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006406

**ORF Size:** 813 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:**

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\\_006406.2](#)

**RefSeq Size:** 921 bp

**RefSeq ORF:** 816 bp

**Locus ID:** 10549

**UniProt ID:** [Q13162](#)

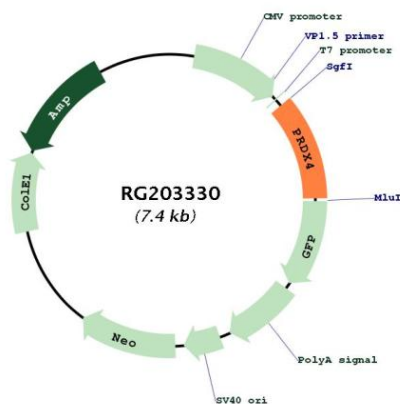
**Cytogenetics:** Xp22.11

**Domains:** AhpC-TSA

**Protein Families:** Druggable Genome

**Gene Summary:** The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. The protein is localized to the cytoplasm. Peroxidases of the peroxiredoxin family reduce hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. This protein has been found to play a regulatory role in the activation of the transcription factor NF-kappaB. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG203330