

## Product datasheet for **MG201992**

### Prdx1 (NM\_011034) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prdx1 (NM\_011034) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Prdx1  
**Synonyms:** MSP23; NkefA; OSF-3; OSF3; PAG; Paga; Prdx1; prx1; Prxl; TdpX2; TDX2; TPxA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201992 representing NM\_011034  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTTCAGGAAATGCAAAAATTGGGTATCCTGCTCCCAACTTCAAAGCTACAGCTGTTATGCCAGATG  
 GACAATCAAAGATATCAGCCTAAGTGAATACAAAGGAAAATATGTTGTGTTCTTCTTTACCTCTTGA  
 CTTTACTTTTGTGTGCCACGGAGATCATTGCTTTCAGTGATAGAGCCGATGAATTTAAGAACTCAAC  
 TGCCAAGTGATTGGCGTCTGTGGATTCTCACTTCTGTCATCTGGCATGGATTAACACACCCAAGAAAC  
 AAGGAGGATTGGGACCCATGAACATCCCTTAATATCAGATCCCAAGCGCACCATTGCTCAGGATTATGG  
 AGTCTTAAAGGCTGATGAAGGTATCTTTTCAGGGCCTTTTATTATTGATGATAAAGGTATCCTTCGA  
 CAGATAACAATAACGATCTCCCGTTGGCCGCTCTGTGGATGAGATTATACGACTAGTCCAGGCCCTCC  
 AGTTCACTGACAAACATGGTGAAGTGTGTCCAGCTGGCTGAAACCTGGCAGTGATACCATCAAGCCTGA  
 TGTCAATAAGAGCAAAGAGTATTCTCTAAGCAGAAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG201992 representing NM\_011034  
 Red=Cloning site Green=Tags(s)

MSSGNAKIGYPAPNFKATAVMPDGQFKDISLSEYKGYVVFYPLDFTFVCPTIEIIAFSDRADEFKLN  
 CQVIGASVDSHFCHLAWINTPKKQGLGPMNIPLISDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILR  
 QITINDLPVGRSVDEIIRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVNKSKKEYFSKQK

**TRTRPLE** - GFP Tag - V

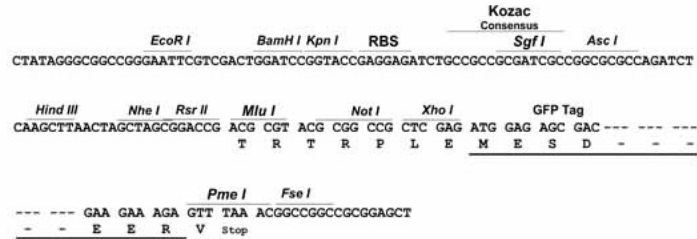
**Restriction Sites:** Sgfl-MluI



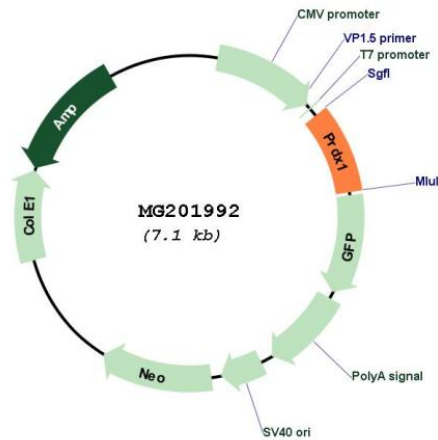
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Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_011034  
 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](mailto: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\\_011034.4](#)

**RefSeq Size:** 1418 bp

**RefSeq ORF:** 600 bp

**Locus ID:** 18477

**UniProt ID:** [P35700](#)

**Cytogenetics:** 4 53.28 cM

**Gene Summary:** Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H<sub>2</sub>O<sub>2</sub> (By similarity). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation (PubMed:19766572).[UniProtKB/Swiss-Prot Function]