

Product datasheet for MR201992

Prdx1 (NM_011034) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prdx1 (NM_011034) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Prdx1
Synonyms: MSP23; NkefA; OSF-3; OSF3; PAG; Paga; Prdx1; prx1; Prxl; TdpX2; TDX2; TPxA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201992 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTTCAGGAAATGCAAAAATTGGGTATCCTGCTCCCAACTTCAAAGCTACAGCTGTTATGCCAGATG
GACAATCAAAGATATCAGCCTAAGTGAATACAAAGGAAAATATGTTGTGTTCTTCTTTTACCCTTTGA
CTTTACTTTTGTGTGCCACGGAGATCATTGCTTTCAGTGATAGAGCCGATGAATTTAAGAACTCAAC
TGCCAAGTGATTGGCGTCTGTGGATTCTCACTTCTGTCATCTGGCATGGATTAACACACCCAAGAAAC
AAGGAGGATTGGGACCCATGAACATCCCTTAATATCAGATCCCAAGCGCACCATTGCTCAGGATTATGG
AGTCTTAAAGGCTGATGAAGTATCTTTTCAGGGCCTTTTTATTATTGATGATAAAGGTATCCTTCGA
CAGATAACAATAAACGATCTCCCGTTGGCCGCTCTGTGGATGAGATTATACGACTAGTCCAGGCCTTCC
AGTTCACTGACAAACATGGTGAAGTGTGTCCAGCTGGCTGAAACCTGGCAGTGATACCATCAAGCCTGA
TGTCATAAGAGCAAAGAGTATTCTCTAAGCAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201992 protein sequence
Red=Cloning site Green=Tags(s)

MSSGNAKIGYPAPNFKATAVMPDQFKDISLSEYKGYVVFYPLDFTFVCPTTEIIAFSDRADEFKLN
CQVIGASVDSHFCHLAWINTPKKQGGGLGPMNIPLISDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILR
QITINDLPVGRSVDEIIRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVNKSKYFSKQK

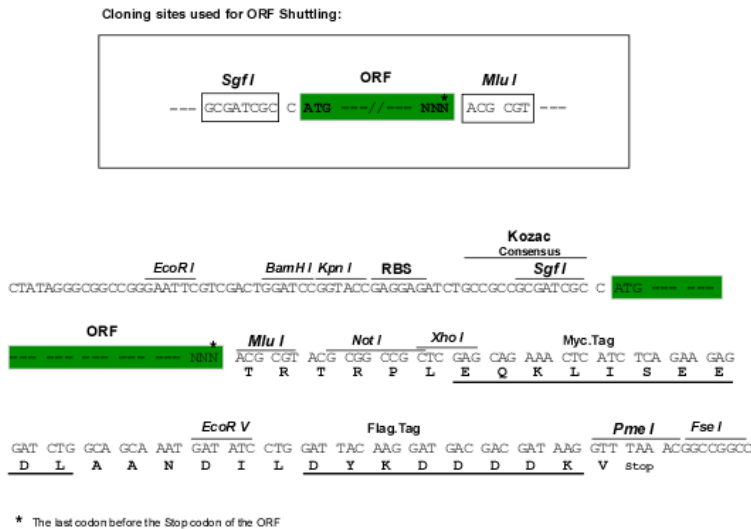
TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011034

ORF Size: 600 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_011034.4](#)

RefSeq Size: 1417 bp

RefSeq ORF: 600 bp

Locus ID: 18477

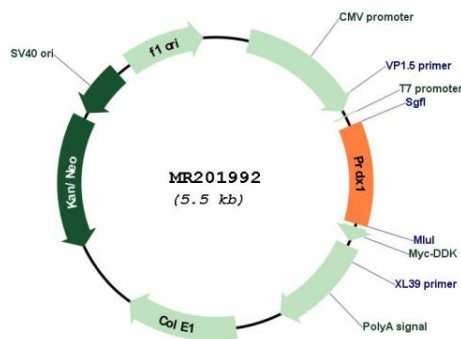
UniProt ID: [P35700](#)

Cytogenetics: 4 53.28 cM

MW: 22.2 kDa

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 H₂O₂ (By similarity). Reduces an intramolecular disulfide bond in GPD5 that gates the ability to GPD5 to drive postmitotic motor neuron differentiation (PubMed:19766572).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201992