

## Product datasheet for MR224040

### Prdx5 (NM\_012021) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prdx5 (NM\_012021) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Prdx5  
**Synonyms:** AOEB1; AOEB166; AOPP; P; PLP; PMP; Pmp20; Prd; Prdx6; PrxV  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR224040 representing NM\_012021  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTACAGCTGGGGCTTCGAGTCTGGGCTGCAAAGCCAGTTCTGTGCTCCGTGCATCGACGTGCTTGG  
CAGGCAGAGCAGGCCGAAAGAAGCAGTTGGGAGTGTGGCGGAGCCCGAGCTTCAGCAGCTCCGCGGT  
GACCATGGCCCCGATCAAGGTGGGAGATGCCATCCCTCAGTGGAGGATTTGAAGGGGAACCGGGAAAG  
AAGGTGAACCTGGCAGAGCTGTTCAAGGCAAGAAAGGTGTTTTGTTGGAGTCCCTGGGCATTTACAC  
CTGGCTGTTCTAAGACCCACCTGCCTGGGTTTGTGGAGCAAGCTGGAGCTCTGAAGCCAAGGGAGCGCA  
GGTGGTGGCCTGTCTGAGCGTTAATGACGTCTTTGTGATTGAAGAGTGGGGTCGAGCCCACCAGGCAGAA  
GGCAAGGTTCCGGCTCCTGGCTGACCCCACTGGAGCCTTTGGGAAGGCGACAGACTTATTATTGGATGATT  
CTTTGGTGTCTCTCTTTGGGAATCGTCGGCTGAAAAGGTTCTCCATGGTGATAGACAACGGCATAGTGAA  
GGCACTGAACGTGGAGCCAGATGGCACAGGCCTCACCTGCAGCCTGGCCCCAACATCCTCTCAACTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR224040 representing NM\_012021  
 Red=Cloning site Green=Tags(s)

MLQLGLRVLGCKASSVLRASVCLAGRAGRKEAGWECGGARFSSSAVTMAPIKVGDAIPVVEVFEGEPGK  
KVNLAELFKGKGVLFVPGAFTPGCSKTHLPGFVEQAGALKAKGAQVVAQLSVNDVVFVIEEWGRAHQAE  
GKVRLLADPTGAFGKATDLLLDDSLVSLFGNRRLLKRFSMVIDNGIVKALNVEPDGTGLTCSLAPNILSQL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



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Chromatograms: [https://cdn.origene.com/chromatograms/ja2491\\_e10.zip](https://cdn.origene.com/chromatograms/ja2491_e10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_012021

ORF Size: 633 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\\_012021.3](#)

**RefSeq Size:** 688 bp

**RefSeq ORF:** 633 bp

**Locus ID:** 54683

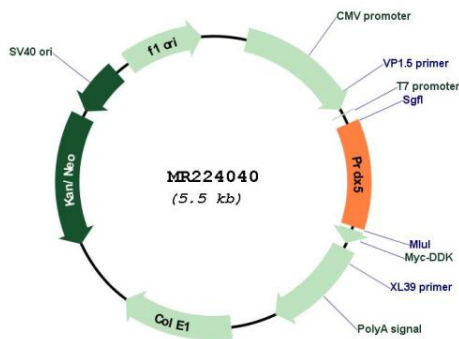
**UniProt ID:** [P99029](#)

**Cytogenetics:** 19 5.08 cM

**MW:** 21.9 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 plays an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. The use of alternate transcription start sites may result in use of alternate in-frame translation start codons that generate alternate isoforms that are targeted to the mitochondrion or peroxisome/cytoplasm. [provided by RefSeq, Nov 2017]

**Product images:**



Circular map for MR224040