

Product datasheet for **MC201312**

Prdx4 (NM_016764) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prdx4 (NM_016764) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Prdx4
Synonyms:	AOE372; Prx-iv; Prx4; TRANK
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC019578 sequence for NM_016764 CCCACGCGTCCGGTCGCGCGGTCTCCAGCGCGCCGTTTTAGCTGGCTGCCTGGCGGCAGGGGACTCTGTG CTTTAGCAGAGGGACGTGTTTTTCGCGCTTGCTTGGTCATGGAGGCGCGGTCCAAGCTGCTGGACGGGACC ACGGCGTCCCGTCGCTGGACCCGAAAGCTGGTGTGTCTCCTGCCGCCGCTGCTGCTGTTCTGTTGCGGA CCGAATCTCTGCAAGGCTTGGAGAGTGATGAACGGTTCGGACCCGCGAAATGAGTGCCACTTCTACGC TGGTGGACAAGTGTACCCCGGGAGGCGTCCCGGGTTTCAGTCGCGGATCACTCCCTGCATCTAAGCAAA GCCAAGATCTCCAAGCCAGCACCTTATTGGGAAGGAACAGCTGTGATTAACGGAGAATCAAGGAGCTCA AACTGACTGACTATCGTGGGAAATACTTGGTTTTTTCTTCTACCCACTGGATTTACCTTTGTGTGTCC AACTGAAATCATCGTTTTGGGGATCGAATTGAAGAATCAAATCTATAAATACTGAAGTGGTAGCATGC TCTGTTGACTCTCAGTTTACCCACTTGGCCTGGATTAATACCCCTCGAAGACAAGGAGGACTGGGCCAA TAAGGATTCCACTTCTTCTGACCTGAACCATCAGATCTCAAAGGACTATGGTGTATACCTTGAAGACTC AGGACATACTCTTAGAGGCTCTTTATTATCGATGACAAAGGAGTCTGAGGCAGATTACTCTGAATGAC CTTCTGTGCGGAAGATCAGTGGACGAGACACTGCGTTTTGGTTCAAGCCTTCCAGTACACTGACAAGCATG GAGAAGTCTGCCCTGCTGGCTGGAAACCTGGTAGTGAAACAATAATCCCAGATCCAGCTGGAAAACCTGAA GTATTTGACAAGCTAACTGAAAAGTACTTCAGTTATGATGTTTGGACCTTCTCAATAAAGGTCATTGT GTTATTACCATAAAAAAAAAAAAAA
Restriction Sites:	RsrII-NotI
ACCN:	NM_016764
Insert Size:	825 bp



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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](#)

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: [BC019578](#), [AAH19578](#)

RefSeq Size: 1004 bp

RefSeq ORF: 825 bp

Locus ID: 53381

UniProt ID: [O08807](#)

Cytogenetics: X 72.38 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 (PubMed:11229364). Regulates the activation of NF-kappa-B in the cytosol by a modulation of I-kappa-B-alpha phosphorylation (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) lacks contains an alternate exon in the 3' coding region compared to variant 1, that causes a frameshift. The resulting isoform (2) has a shorter and distinct C-terminus compared to isoform 1.