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Product datasheet for SC115851

Peroxiredoxin 3 (PRDX3) (NM_006793) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Peroxiredoxin 3 (PRDX3) (NM_006793) Human Untagged Clone
Tag:	Tag Free
Symbol:	Peroxiredoxin 3
Synonyms:	AOP-1; AOP1; HBC189; MER5; PRO1748; prx-III; SP-22
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_006793, the custom clone sequence may differ by one or more nucleotides

ATGGCGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCGACATGTGAGTGCCATTCCTTGGGGCA
TTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGAAGAACGAGCTTGACAAATTTATTGTGTTCTGG
TTCCAGTCAAGCAAAATTATTCAGCACCAGTTCCTCATGCCATGCACCTGCTGTCACCCAGCATGCACCC
TATTTTAAGGGTACAGCCGTTGTCAATGGAGAGTTCAAAGACCTAAGCCTTGATGACTTTAAGGGGAAAT
ATTTGGTGCTTTTCTTCTATCCTTTGGATTTCACCTTTGTGTGTCCTACAGAAATTGTTGCTTTTAGTGA
CAAAGCTAACGAATTTCACGACGTGAACTGTGAAGTTGTCGCAGTCTCAGTGGATTCCCACTTTAGCCAT
CTTGCCTGGATAAATACACCAAGAAAGAATGGTGGTTTGGGCCACATGAACATCGCACTCTTGTCAGACT
TAACTAAGCAGATTTCCCGAGACTACGGTGTGCTGTTAGAAGGTTCTGGTCTTGCACTAAGAGGTCTCTT
CATAATTGACCCCAATGGAGTCATCAAGCATTTGAGCGTCAACGATCTCCCAGTGGGCCGAAGCGTGGAA
GAAACCCTCCGCTTGGTGAAGGCGTTCCAGTATGTAGAAACACATGGAGAAGTCTGCCCAGCGAACTGGA
CACCGGATTCTCCTACGATCAAGCCAAGTCCAGCTGCTTCCAAAGAGTACTTTCAGAAGGTAAATCAGTA
G

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006793 unedited
ACCCGATTTGTAATCCGACTTTTATATAGGGCGGCAGCGCAATTCGCACGAGGGCGCCCG
AGTGCACTGAAGATGGCGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCGACAT
GTGAGTGCCATTCCTTGGGGCATTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGA
AGAACGAGCTTGACAAATTTATTGTGTTCTGGTTTTCTTCAAGCAAAATTATTCAGCACC
AGTTCCTCATGCCATGCACCTGCTGTCACCCAGCATGCACCCTATTTTAAGGGTACAGCC
GTTGTCAATGGAGAGTTCAAAGACCTAAGCCTTGATGACTTTAAGGGGAAATATTTGGTG
CTTTTCTTCTATCCTTTGGATTTCACCTTTGTGTGTCCTACAGAAATTGTTGCTTTTAGT
GACAAAGCTAACGAATTTCACGATGTGAACTGTGAAGTTGTCGCAGTCTCAGTGGATTCC
CACTTTAGCCATCTTGCCTGGATAAATACACCAAGAAAGAATGGTGGTTTGGGCCACATG
AACATCGCACTCTTGTCAGACTTAACTAAGCAGATTTCCCGAGACTACGGTGTGCTGTTA
GAAGGTTCTGGTCTTGCACTAAGAGGTCTCTTCATAATTGACCCCAATGGAGTCATCAAG
CATTTGAGCGTCAACGATCTCCCAGTGGGCCGAAGCGTGGAAGAAACCCTCCGCTTGGTG
AAAGCGTTCCAGTATGTAGAAACACATGGAGAAGTCTGCCCAGCGAACTGGACACCCGNA
TTCTCCTACGATCAAGCCAAGTTCAGCTGCTTCCAAGAGTACTTTCAGAAAGGTAATCAG
TAGATCACCATGTGTATCTGCACCTTCTTCACTGAGAGAAGAACCACAGTGAAACCCTGC
TTTATCATTTTCAGATGGTAATTGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006793 unedited
GTAATTCTTGNCCGCGGCCGCATTCTANATCGAGTTTTTTTTTTTTTTTTTGTTAAAAT
GCAAATGTTTTAAAATATGTTTATTTTGTATGTTTTACAATGAATACTTCAGCAAAGAAA
ATAATTATAATTTCAAAATGCAATCCCTGGATTTGATAAATATCCTTTATAATCGATTAC
ACTAATCAATATCTAGAAATATACATAGACAAAGTTAGCTAATGAATAAAATAAGTAAAA
TGACTACATAAACTCAATTTCAGGGATGAGGGATCATGCATGATCAATTAAGTCACTCTG
CCACTTTTTAAAATAATACGATTCACATTTGCTTCAATCACATAAACATTCATTGCAGGA
GTTACACGGCTAATCATGGAAAATTATGATCTTTGTTAGCTTAAAAGAAAATTCAGTTTA
ATACAAAGACATTCAAGATGAAAATTTCAGGACCGTTGATCAGAAGCTTTCAATGTGTGT
TGCTCTACTTTATTATAGGCAAGATTCAAGTAAGGCTAAGAAAGAAGAGTGTTTCCATTG
AGACATGATCTAAGAATAGCCTTCTATAGAGGCAAATTATGTTCTGTAGAAACTAGCTAG
CCAGCCACCAAGATGTTACCAATAAAGGATTCCTTGTACTAGCAACTAACCATGTTTAAA
AGGTCTTAGCCAGAATTACAAAAACAAAACATTTAGAGTAATACTTATGAATACAAGCAT
AATTGGTTCCTTGCCTTCTACAAATACCATCTTNGAAATGATAAAAGCAGGTTTCAACTG
TGGGTCTTCTCTCAGTTGAGAGGTGCAGATCACATGGGTGATCTACTGATTTACCTCCTG
AATACTCTTTGAAACAGCTGGACTTGCCTGTATCGTAGAGAATCCGTGTCAGTTGCTGGG

Restriction Sites: NotI-NotI

ACCN: NM_006793

Insert Size: 1710 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
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_006793.2, NP_006784.1
RefSeq Size:	1591 bp
RefSeq ORF:	771 bp
Locus ID:	10935
UniProt ID:	P30048
Cytogenetics:	10q26.11
Domains:	AhpC-TSA
Protein Families:	Transcription Factors

Gene Summary: This gene encodes a mitochondrial protein with antioxidant function. The protein is similar to the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase, and it can rescue bacterial resistance to alkylhydroperoxide in E. coli that lack the C22 subunit. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologs suggest that these genes consist of a family that is responsible for the regulation of cellular proliferation, differentiation and antioxidant functions. This family member can protect cells from oxidative stress, and it can promote cell survival in prostate cancer. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 1, 3, 13 and 22. [provided by RefSeq, Oct 2014] Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (a).