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Product datasheet for SC304039

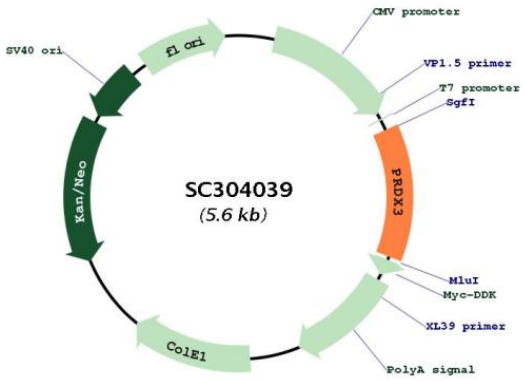
Peroxiredoxin 3 (PRDX3) (NM_014098) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Peroxiredoxin 3 (PRDX3) (NM_014098) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRDX3
Synonyms:	AOP-1; AOP1; HBC189; MER5; PRO1748; prx-III; SP-22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304039 representing NM_014098. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGCGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCGACATGTGAGTGCCATTCCTTGGGGC ATTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGAAGAACGAGCTTGACAAATTTATTGTGTTCT GGTTCCAGTCAAGCACCCTATTTTAAGGGTACAGCCGTTGTCAATGGAGAGTTCAAAGACCTAAGCCTT GATGACTTTAAGGGGAAATATTTGGTGCTTTTCTTCTATCCTTTGGATTTCACCTTTGTGTGTCCTACA GAAATTGTTGCTTTTAGTGACAAAGCTAACGAATTTCACGACGTGAACTGTGAAGTTGTCGCAGTCTCA GTGGATTCCCACTTTAGCCATCTTGCCTGGATAAATACACCAAGAAAGAATGGTGGTTTGGGCCACATG AACATCGCACTCTTGTCAGACTTAACTAAGCAGATTTCCCGAGACTACGGTGTGCTGTTAGAAGGTTCT GGTCTTGCACTAAGAGGTCTCTTCATAATTGACCCCAATGGAGTCATCAAGCATTTGAGCGTCAACGAT CTCCCAGTGGGCCGAAGCGTGGAAGAAACCCTCCGCTTGGTGAAGGCGTTCCAGTATGTAGAAACACAT GGAGAAGTCTGCCCAGCGAACTGGACACCGGATTCTCCTACGATCAAGCCAAGTCCAGCTGCTTCCAAA GAGTACTTTCAGAAGGTAAATCAGTAG ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI

View online »

Plasmid Map:



ACCN:	NM_014098
Insert Size:	717 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_014098.3

RefSeq Size:	1583 bp
RefSeq ORF:	717 bp
Locus ID:	10935
Cytogenetics:	10q26.11
Protein Families:	Transcription Factors
MW:	25.8 kDa
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 (2) lacks an alternate in-frame segment compared to variant 1, resulting in an isoform (b) which is shorter than isoform a. Isoform b lacks the complete transit peptide found in isoform a, and may not be found in the mitochondrion.