

Product datasheet for **SC117092**

Peroxiredoxin 6 (PRDX6) (NM_004905) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Peroxiredoxin 6 (PRDX6) (NM_004905) Human Untagged Clone
Tag:	Tag Free
Symbol:	Peroxiredoxin 6
Synonyms:	1-Cys; aiPLA2; AOP2; HEL-S-128m; LPCAT-5; NSGPx; p29; PRX
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117092 sequence for NM_004905 edited (data generated by NextGen Sequencing)

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ATGCCCGGAGGTCTGCTTCTCGGGGACGTGGCTCCCAACTTTGAGCCAATACCACGTC
GGCCGCATCCGTTTCCACGACTTCTGGGAGACTCATGGGCATTCTTCTCCACCCCT
CGGGACTTTACCCAGTGTGCACCACAGAGCTTGGCAGAGCTGCAAAGCTGGCACCAGAA
TTTGCCAAGAGGAATGTTAAGTTGATTGCCCTTCAATAGACAGTGTGAGGACCATCTT
GCCTGGAGCAAGGATATCAATGCTTACAATTGTGAAGAGCCACAGAAAAGTTACCTTTT
CCCATCATCGATGATAGGAATCGGGAGCTTGCCATCCTGTTGGGCATGCTGGATCCAGCA
GAGAAGGATGAAAAGGCATGCCTGTGACAGCTCGTGTGGTGTGTTTTTGGTCCTGAT
AAGAAGCTGAAGCTGTCTATCCTCTACCCAGCTACCACTGGCAGGAACTTTGATGAGATT
CTCAGGGTAGTCATCTCTCCAGCTGACAGCAGAAAAAAGGGTTGCCACCCAGTTGAT
TGGAAGGATGGGGATAGTGTGATGGTCCTTCCAACCATCCCTGAAGAAGAAGCCAAAAAA
CTTTTCCCGAAAGGAGTCTTACCAAAGAGCTCCCATCTGGCAAGAAATACCTCCGCTAC
ACACCCAGCCTTAA
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Clone variation with respect to NM_004905.2



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5' Read Nucleotide Sequence: >OriGene 5' read for NM_004905 unedited
 TCCTATAGGGCGGCCGGAATTCGCACGAGGCCGGTTGCTTGCTGTCCCAGCGGGCCCC
 CTCATCACCGTCGCCATGCCCGGAGGTCTGCTTCTCGGGGACGTGGCTCCCAACTTTGAG
 GCCAATACCACCGTCGGCCGCATCCGTTTCCACGACTTCTGGGAGACTCATGGGGCATT
 CTCTTCTCCACCTCGGACTTTACCCAGTGTGCACCACAGAGCTTGGCAGAGCTGCA
 AAGCTGGCACCAGAATTTGCCAAGAGGAATGTTAAGTTGATTGCCCTTCAATAGACAGT
 GTTGAGGACCATTTGCCTGGAGCAAGGATATCAATGCTTACAATTGTGAAGAGCCACA
 GAAAAGTTACCTTTTCCCATCATCGATGATAGGAATCGGGAGCTTGCCATCCTGTTGGGC
 ATGCTGGATCCAGCAGAGAAGGATGAAAAGGGCATGCCTGTGACAGCTCGTGTGGTGT
 GTTTTTGGTCTGATAAGAAGCTGAAGCTGTCTATCCTTACCCAGCTACCACTGGCAGG
 AACTTTGATGAGATTCTCANGGTAGTCATCTCTCCAGCTGACAGCAGAAAAAGGGTG
 CCACCCAGTTGATTGGAAGGATGGGGATAGTGGGATGGGTCTTTTACCATCCNNTGAG
 AAAGAGCCAAAANNACTNTTCCCGAAAGGAGTCTTACCAAAGAAAGCTCCCATCTGGG
 CAGAAAAACCTNCGCTACACCCCCAGCCTTAAGTCTCTTGGGAAAANTGGNTGCTGTG
 AGCCAAAGGATGTCAGCTGCCAATTGGTGGTTTTCTGCAGCATCCATAAACCATNCTTG
 TGCATACAGNCAAGTTTTTAAGGTGCTTACCCAGGGCNTATAAATGAAAATGCCCTAA
 AAGTTCTTGAGATCTTTATACTTTTGCCTTACAGCATCAATCCTTCTAACTAACCCGCG
 GGGGGTCTGAAAAAAGGTCTGGATAAACCAACTTGTGGGACCTTGGAGGCTTGGACAT
 GAAAA

3' Read Nucleotide Sequence: >OriGene 3' read for NM_004905 unedited
 TGGCAACCTTCCAGGGCCAGGNATAGCACTGGGGAGGGGTACAGGGCATGCCACCCGGG
 ATCTGTTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTT
 TTTTTCAGTTTTAACAAAGGATTTATTTTGTTCCTAAAAAGTAAAATCTAGAAAATAG
 CAACCCACTGCAAGAAGATTCTATACTAAAACATTTTCAATCATTCTCTCTTCTTCA
 CATGGTGTACTCTTTCATGTACACATCATCGGAAAACAGACTGATAAATGCAAACCTGT
 GTGAAAGGCACATGGCACTAATATTGCTCACACCTGCTACACCTCCTTGGGAGCCAAGGG
 AAGCCTTTTCTGCAATCTCCCCATTTTGTAGAAACTTATCACAAATTCGCGCGGNCGCA
 AAATATTTAAAGGTCTCTTCCCTGCTTCACTTATCTACTAGGAAGGTACAGAATTA
 AAAGCTTTTTTTCCCCAGCTGTGATCAAGATGTATTAAGAATATGAAAGAGCATCTG
 GGTTATTCTAGAAGTTCTGTGATCAAAACATATTAATAAATAAAGCGCATCTGGGTT
 ATTCTAGAAGTTCTGGGCTTTATACTTGGATATTTACAGAGGAAGTTGAACTTCAAGTT
 CTGCCACTCTTAAAATGGGTGACAGGAGGACGTGATAGGACAGTTAAAAAATGGNNA
 ATGTNCTTCTCTGATGGAGTGAACAAGCTTTGTCAACCTCAACAATATGACTTATGGGTC
 CAAGCCCTGCGAGATCCACACGTTTGTGTTAATACAGACATATCAACCAAACCCCCCA
 ATGCTGAGTATAATGGATTGATTGTGAGGCAAAGATTAAGAT

Restriction Sites: NotI-NotI

ACCN: NM_004905

Insert Size: 1700 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_004905.2](#), [NP_004896.1](#)

RefSeq Size: 1715 bp

RefSeq ORF: 675 bp

Locus ID: 9588

UniProt ID: [P30041](#)

Cytogenetics: 1q25.1

Domains: AhpC-TSA

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Methane metabolism, Phenylalanine metabolism

Gene Summary: The protein encoded by this gene is a member of the thiol-specific antioxidant protein family. This protein is a bifunctional enzyme with two distinct active sites. It is involved in redox regulation of the cell; it can reduce H₂O₂ and short chain organic, fatty acid, and phospholipid hydroperoxides. It may play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury. [provided by RefSeq, Jul 2008]