

Product datasheet for RC218419L4

OriGene Technologies, Inc.

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Peroxiredoxin 3 (PRDX3) (NM_014098) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Peroxiredoxin 3 (PRDX3) (NM_014098) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Peroxiredoxin 3

Synonyms: AOP-1; AOP1; HBC189; MER5; PRO1748; prx-III; SP-22

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC218419).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_014098

ORF Size: 714 bp





Peroxiredoxin 3 (PRDX3) (NM_014098) Human Tagged Lenti ORF Clone - RC218419L4

OTI Disclaimer: 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: <u>NM 014098.2</u>, <u>NP 054817.2</u>

RefSeq Size:1537 bpRefSeq ORF:717 bpLocus ID:10935

Cytogenetics: 10q26.11 **Protein Families:** Transcription Factors

MW: 25.7 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

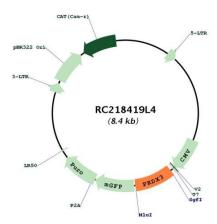
homologs suggest that these genes consist of a family that is responsible for the regulation of cellular proliferation, differentiation and antioxidant functions. This family member can protect cells from oxidative stress, and it can promote cell survival in prostate cancer.

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]



Product images:



Circular map for RC218419L4