

Product datasheet for RC217362

Peroxiredoxin 5 (PRDX5) (NM_181652) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Peroxiredoxin 5 (PRDX5) (NM_181652) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Peroxiredoxin 5
Synonyms:	ACR1; AOEB166; B166; HEL-S-55; PLP; PMP20; PRDX6; prx-V; PRXV; SBB110
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217362 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGGACTAGCTGGCGTGTGCGCCCTGAGACGCTCAGCGGGCTATATACTCGTCGGTGGGGCCGGCGGTCAGTCTGCGGCAGCGGCAGCAAGACGGTGCAGTGAAGGAGAGTGGGCGTCTGGCGGGTCCGCAGTTTCAGCAGAGCCGCTGCAGCCATGGCCCAATCAAGGTTGGCTCCTGGCTGATCCCACTGGGCCTTTGGGAAGGAGACAGACTTACTAGATGATTCGCTGGTGTCCATCTTTGGGAATCGACGTCTCAAGAGTTCTCCATGGTGGTACAGGATGGCATAAGTGAAGGCCCTGAATGTGGAACCAGATGGCACAGGCTCACCTGCAGCCTGGCACCAATATCATCTCACAGCTC ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA >RC217362 protein sequence Red=Cloning site Green=Tags(s) MGLAGVICALRRSAGYILVGGAGGQSAAAAARRCSEGEWASGGVRSFSRAAAAMAPIKVRLADPTGAFGKETDLLLDDSLVSIFGNRRLKRFSMVVDGIVKALNVEPDGTGLTCSLAPNIISQL TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Restriction Sites:	Sgfl-MluI



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Cloning Scheme:



ACCN: NM_181652

ORF Size: 375 bp

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: [NM_181652.2](#), [NP_857635.1](#)

RefSeq Size: 646 bp

RefSeq ORF: 378 bp

Locus ID: 25824

UniProt ID: [P30044](#)

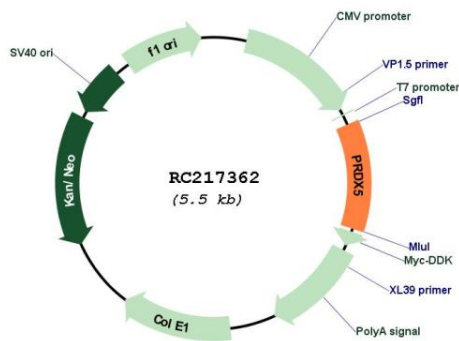
Cytogenetics: 11q13.1

Protein Families: Druggable Genome

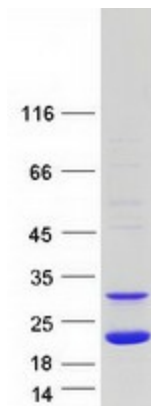
MW: 12.8 kDa

Gene Summary: This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein interacts with peroxisome receptor 1 and plays an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. The use of alternate transcription start sites is thought to result in transcript variants that use different in-frame translational start codons to generate isoforms that are targeted to the mitochondrion (isoform L) or peroxisome/cytoplasm (isoform S). Multiple related pseudogenes have been defined for this gene. [provided by RefSeq, Nov 2017]

Product images:



Circular map for RC217362



Coomassie blue staining of purified PRDX5 protein (Cat# [TP317362]). The protein was produced from HEK293T cells transfected with PRDX5 cDNA clone (Cat# RC217362) using MegaTran 2.0 (Cat# [TT210002]).