

## Product datasheet for MR202605

### Prdx6 (BC013489) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prdx6 (BC013489) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prdx6
Synonyms:	Prdx6-rs3, Aop2-rs3, GPx, aiPLA2, Prdx5, CP-3, ORF06, 1-cysPrx, mKIAA0106
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202605 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCGGAGGGTTGCTTCTCGGGGACGAAGCCCCCACTTTGAGGCCAATACCACCATCGGCCGCATCC  
GCTTCCACGATTTCTGGGAGATTCATGGGGCATTCTTTTTCCACCCACGGGACTTTACCCAGTGTG  
CACCACAGAACTTGGCAGAGCTGCAAAGCTGGCGCCAGAGTTGCCAAGAGGAATGTTAAGTTGATTGCT  
CTTTCAATAGACAGTGTGAGGATCATCTTGCCTGGAGCAAGGACATCAATGCTTACAATGGTGAACAC  
CCACGGAAAAGTTGCCATTTCCCATCATTGATGATAAGGGCAGGGACCTGCCATCCTTTGGGCATGTT  
GGATCCAGTCGAGAAGGACGCTAACAACATGCCTGTGACGGCCCGTGTGGTGTTCATTTTTGGCCCTGAC  
AAGAACTGAAGCTGTCTATCCTCTACCCTGCCACCACGGGCAGGAACCTTTGATGAGATTCTCAGAGTGG  
TTGACTCTCTCCAGCTGACAGGCACAAAGCCGGTTGCCACCCAGTTGACTGGAAGAAGGGAGAGAGCGT  
GATGGTAGTTCCACCCCTCTCCGAAGAGGAAGCCAACAATGTTTCCCTAAAGGAGTCTTACCAAAAGAG  
CTCCCGTCTGGCAAAAAATACCTCCGTTATACACCCAGCCT

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR202605 protein sequence  
Red=Cloning site Green=Tags(s)

MPGGLLLGDEAPNFEANTTIGRIRFHDFLGDSWGILFSHPRDFTPVCTTELGRAAKLAPEFAKRNVKLIA  
 LSIDSVEDHLAWSKDINAYNGETPTEKLPFPIIDDKGRDLAILLGMLDPVEKDANNMPVTARVVFIFGPD  
 KKLKLSILYPATTGRNFDEILRVVDSLQLTGTKPVATPVDWKKGESVMVPTLSEEEAKQCFPKGVFTKE  
 LPSGKKYLRYTPQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** BC013489

**ORF Size:** 672 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:** [BC013489](#), [AAH13489](#)

**RefSeq Size:** 1440 bp

**RefSeq ORF:** 674 bp

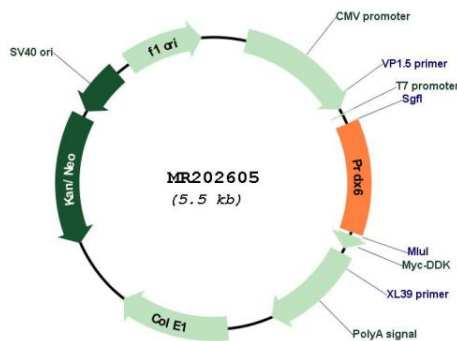
**Locus ID:** 11758

**Cytogenetics:** 1 69.75 cM

**MW:** 24.8 kDa

**Gene Summary:** This gene encodes a member of the peroxiredoxin family of peroxidases. The encoded protein is a bifunctional enzyme that has glutathione peroxidase and phospholipase activities. This protein is an antioxidant that reduces peroxidized membrane phospholipids and plays an important role in phospholipid homeostasis based on its ability to generate lysophospholipid substrate for the remodeling pathway of phospholipid synthesis. Mice lacking this gene are sensitive to oxidant stress, have altered lung phospholipid metabolism and susceptible to skin tumorigenesis. Alternate splicing of this gene results in multiple transcript variants. A pseudogene of this gene is found on chromosome 4. [provided by RefSeq, Dec 2014]

### Product images:



Circular map for MR202605