

Recombinant Human Peroxiredoxin 3, T7-tagged

Cat. No. PRDX3-822H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant PRDX3 protein, fused to T7-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques, 27693Da (256aa).
Species	Human
Source	E.coli
Description	Thioredoxin-dependent peroxide reductase, mitochondrial is an enzyme that in humans is encoded by the PRDX3 gene. This gene encodes a protein with antioxidant function and is localized in the mitochondrion. This gene shows significant nucleotide sequence similarity to the gene coding for the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase. Expression of this gene product in E. coli deficient in the C22-subunit gene rescued resistance of the bacteria to alkylhydroperoxide. 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 homologues suggest that these genes consist of a family that is responsible for regulation of cellular proliferation, differentiation, and antioxidant functions. Two transcript variants encoding two different isoforms have been found for this gene.
Sequences of amino acids	MAAAVGRLLR ASVARHVSAI PWGISATAAL RPAACGRTSL TNLLCSGSSQ AKLFSTSSSC HAPAVTQHAP YFKGTAVVNG EFKDLSLDDF KGKYLVLFFY PLDFTFVCPT EIVAFSDKAN EFHDVNCEVV AVSVDSHFSH LAWINTPRKN GGLGHMNIAL LSDLTKQISR DYGVLLGSG LALRGLFIID PNGVIKHLVS NDLPVGRSVE ETLRLVKAFQ YVETHGEVCP ANWTPDSPTT KPSPAASKEY

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	FQKVNQ
Formulation	10 mM Tris. pH 8.0. 0.1% Triton X-100. 0.002% NaN ₃ . 10mM DTT
Purity	95% by SDS - PAGE
Applications	MS. SDS
GENE INFORMATION	
Gene Name	PRDX3 peroxiredoxin 3 [Homo sapiens]
Synonyms	PRDX3; MER5; AOP-1; AOP1; MGC104387; MGC24293; PRO1748; SP-22; HBC 189; peroxiredoxin 3; Antioxidant protein 1; peroxiredoxin-3; thioredoxin-dependent peroxide reductase, mitochondrial; prx-III; SP-22; Peroxiredoxin III; EC 1.11.1.15; Protein MER5 homolog; Prx-III; Peroxiredoxin-3
Gene ID	10935
mRNA Refseq	NM_006793
Protein Refseq	NP_006784
MIM	604769
UniProt ID	P30048
Chromosome Location	10q25-q26
Function	Alkyl hydroperoxide reductase activity; caspase inhibitor activity; identical protein

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

binding; kinase binding; oxidoreductase activity; peroxidase activity; peroxiredoxin activity; protein C-terminus binding; protein binding; protein kinase binding

PDBrendering based
on 1zye. Available
structures:1zye



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA