

Recombinant Human Peroxiredoxin 3

Cat. No. PRDX3-371H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PRDX3 produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 195 amino acids (63-256 a.a.) and having a molecular mass of 21.5 kDa. The PRDX3 is purified by proprietary chromatographic techniques.
Species	Human
Source	E.coli
Protein Length	63-256 a.a.
Description	PRDX3 is part of the peroxiredoxin family of antioxidant enzymes that reduces hydrogen peroxide and alkyl hydroperoxides. PRDX3 is particularly located in the mitochondria and involved in the regulation of cellular redox status by serving as a primary line of defense against H ₂ O ₂ produced during respiration. PRDX3 is a significant regulator of the abundance of mitochondrial H(2)O(2), which itself promotes apoptosis in cooperation with other mediators of apoptotic signaling. PRDX3 mitochondrial protein is significantly decreased in Alzheimer Disease and Down Syndrome.
Amino Acid Sequence	MPAVTQHAPY FKGTA VVNGE FKDSLDDDFK GKYLVLFFYP LDFTFVCPT EIVAFSDKANE FHDVNCEVVA VSVDSHFSL AWINTPRKNG GLGHMNIALL SDLTKQISR D YGVLLEGSL ALRGLFIIDP NGVIKHL SVN DLPVGRSVEE TLRLVKAFQY VETHGEVCPA NWTPDSPTIK PSPAASKEYF QKVNQ.
Physical Appearance	Sterile Filtered colorless solution.

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

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

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Formulation	The PRDX3 solution contains 20mM Tris pH-8, & 10% glycerol.
Purity	Greater than 95% as determined by SDS-PAGE.
Stability	PRDX3 although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	PRDX3 peroxiredoxin 3 [Homo sapiens]
Synonyms	PRDX3; peroxiredoxin 3; AOP1; MER5; AOP-1; SP-22; PRO1748; MGC24293; MGC104387; antioxidant protein 1; EC 1.11.1.15; thioredoxin-dependent peroxide reductase
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 binding; oxidoreductase activity; protein C-terminus binding; protein kinase binding;

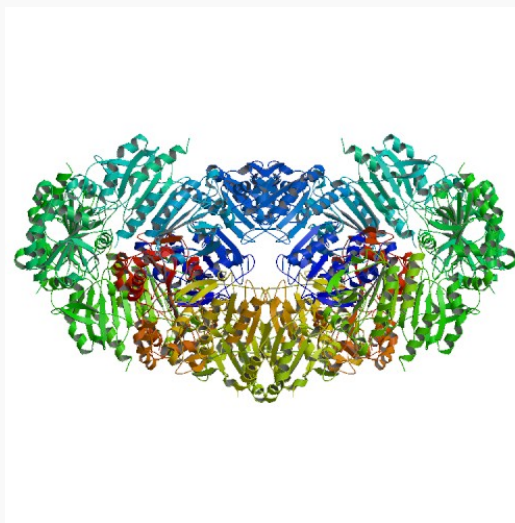
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peroxiredoxin activity

PDB rendering based
on 1zye.



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