

Peroxiredoxin 3, 63-256 aa

Human, Recombinant, *E.coli*

Cat. No. IBATGP0321

Full name: Thioredoxin-dependent peroxide reductase mitochondrial

NCBI Accession No.: NP_006784

Synonyms: PRDX3, PRX III, Antioxidant protein 1 (AOP-1)

Description: Peroxiredoxin 3, also known as PRDX3, is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. Peroxiredoxin 3 is specifically localized in mitochondria and believed to play important roles in the regulation of cellular redox status by serving as a primary line of defense against H₂O₂ produced during respiration. Recombinant human Peroxiredoxin 3 protein was expressed in *E.coli* and purified by using conventional chromatography techniques.

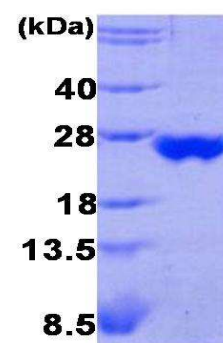
Form: Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 10% glycerol

Molecular Weight: 21.5 kDa (195aa), confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 1mg/ml (determined by Bradford assay)

Biological activity: Specific activity is >2,000 pmol/min/ug. Enzymatic activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25C for 1minute.



15% SDS-PAGE (3ug)

Sequences of aminoacids:

MPAVTQHAPY FKGTAVVNGE FKDSLDDFK GKYLVLFFYP LDFTFVCPT E I VAFSDKANE FHDVNCEVVA VVSDSHFSL AWINTPRKNG
GLGHMNIALL SDLTKQISR D YGVLLLEGSL ALRGLF I IDP NGVIKHL SVN DLPVGRSVEE TLRLVKAFQY VETHGEVCPA NWT PDSPTIK
PSPAASKEYF QKVNQ

General references:

Cox AG., *et al.* (2009). *Biochemistry*. **48**(27):6495-501

Rhee SG., *et al.* (2005). *Free Radic Biol Med*. **38**(12):1543-52

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com