

Bioactive

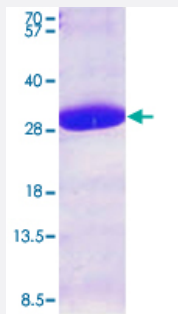
Full-Length

PRDX6 (Human) Recombinant Protein

Catalog # P3491

Size 100 ug

Applications



Specification

Product Description

Human PRDX6 (NP_004896, 1 a.a. - 224 a.a.) full-length recombinant protein with His tag expressed in *Escherichia coli*.

Sequence

MGSSHHHHHHSSGLVPRGSHMPGGLLLGDVAPNFEANTTVGRIRFHDFLGDSWGILFSHPDFT
PVCTTELGRAAKLAPEFAKRNVKLIASIDSVEDHLAWSKDINAYNCEETPEKLPFPIIDDRNRELA
LLGMLDPAEKDEKGMPVTARVVFVFGPDKKLKLSILYPATTGRNFDEILRVVISLQLTAEKRVATP
VDWKDGDSVMVLPTIPEEEAKKLFPGVFTKELPSGKKYLRYTPQP

Host

Escherichia coli

Theoretical MW (kDa)

27.1

Form

Liquid

Preparation Method

Escherichia coli expression system

Purification

Conventional Chromatography

Concentration

1 mg/mL

Purity

> 95% by SDS-PAGE

Activity	Specific activity: approximately 95-120 pmole/min/ug. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX6 and peroxide for 20 min at room temperature. Specific activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25°C for 1 minute.
Quality Control Testing	Loading 3 ug protein in 15% SDS-PAGE
Storage Buffer	In 20 mM Tris-HCl buffer, pH 8.0 (20% glycerol).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — PRDX6

Entrez GeneID	9588
Protein Accession#	NP_004896
Gene Name	PRDX6
Gene Alias	1-Cys, AOP2, KIAA0106, MGC46173, NSGPx, PRX, aiPLA2, p29
Gene Description	peroxiredoxin 6
Omim ID	602316
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the thiol-specific antioxidant protein family. This protein is a bifunctional enzyme with two distinct active sites. It is involved in redox regulation of the cell; it can reduce H ₂ O ₂ and short chain organic, fatty acid, and phospholipid hydroperoxides. It may play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury. [provided by RefSeq]
Other Designations	1-Cys peroxiredoxin OTTHUMP00000032693 acidic calcium-independent phospholipase A2 antioxidant protein 2 non-selenium glutathione peroxidase

Pathway

- [Biosynthesis of phenylpropanoids](#)
- [Metabolic pathways](#)
- [Methane metabolism](#)
- [Phenylalanine metabolism](#)
- [Phenylpropanoid biosynthesis](#)
- [Tropane](#)

Disease

- [Coronary Artery Disease](#)
- [Genetic Predisposition to Disease](#)
- [Obesity](#)