

Product datasheet for **AR09413PU-L**

Peroxiredoxin-4 / PRDX4 (38-271, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Peroxiredoxin-4 / PRDX4 (38-271, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH MWETEERPT</u> REEECHFYG GQVYPGEASR VSVADHSLHL SKAKISKAP YWEGTAVIDG EFKELKLDY RGKYLVEFFY PLDFTFVCPT EIIAFGDRLE EFRSINTEV ACSVDSQFTH LAWINTPRRQ GGLGPIRIPL LSDLTHQISK DYGVYLED SG HTLRGLFIID DKGILRQITL NDLPVGRSVD ETLRLVQAFQ YTDKHGEVCP AGWKPGSETI IPDPAGKLY FDKLN
Tag:	His-tag
Predicted MW:	28.8 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol
Bioactivity:	Specific: Approximately 230-310 pmole/min/μg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX4 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.
Preparation:	Liquid purified protein



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Applications:	Protocol: Activity Assay: <ol style="list-style-type: none">1. Prepare a 50ul reaction mix into a suitable container : The final concentrations are 1mM DTT, 0.03X PBS, 0.5% glycerol.2. Add 5 ul of recombinant PRDX4 solution with various concentrations (0.25ug, 0.5ug) in 45 ul reaction buffer.3. Incubate at 25°C for 2 minutes.4. Add 5ul of 5 mM H₂O₂ as a substrate and incubate the mixture for 20 min.5. Add 20ul of 26 % trichloroacetic acid (TCA) to stop the reaction.6. Add 30ul of Formation solution (10mM Ferrous ammonium sulfate (Fe(II)(NH₄)₂(SO₄)₂), 2.5M KSCN)7. Record the increase in A475nm.
Protein Description:	Recombinant human PRDX4, fused to His-tag at N-terminus, was expressed in E.coli and purified by conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_006397
Locus ID:	10549
UniProt ID:	Q13162 , V9HW63
Cytogenetics:	Xp22.11
Synonyms:	AOE37-2; AOE372; HEL-S-97n; PRX-4
Summary:	The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. The protein is localized to the cytoplasm. Peroxidases of the peroxiredoxin family reduce hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. This protein has been found to play a regulatory role in the activation of the transcription factor NF-kappaB. [provided by RefSeq, Jul 2008]
Protein Families:	Druggable Genome

Product images:

