

Product datasheet for **AR50254PU-S**

Glutathione peroxidase 3 / GPX3 (21-226, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Glutathione peroxidase 3 / GPX3 (21-226, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MQRGQEKSK MDCHGGISGT IYEGALTID GEEYIPFKQY AGKYVLFVNV ASYCGLTGQY IELNALQEEL APFGLVILGF PCNQFGKQEP GENSEILPTL KYVRPGGGFV PNFQLFEKGD VNGEKEQKFY TFLKNSCPPT SELLGTSURL FWPEMKVHDI RWNFEKFLVG PDGIPIMRWH HRTTVSNVKM DILSYMRRQA ALGVKRK
Tag:	His-tag
Predicted MW:	25.7 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.15M NaCl, 1 mM DTT, 50 mM Imodazol
Preparation:	Liquid purified protein
Protein Description:	Recombinant human GPX3(U73C) protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_001316719</u>
Locus ID:	2878
UniProt ID:	<u>P22352</u>
Cytogenetics:	5q33.1
Synonyms:	GPX-3, GPXP, GSHPx-3, GPx-3, GSHPx-P, GSHPXP, GPx-P, GPXP



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Summary:

The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H₂O₂) by glutathione, and thereby protect cells against oxidative damage. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme is secreted, and is abundantly found in plasma. Downregulation of expression of this gene by promoter hypermethylation has been observed in a wide spectrum of human malignancies, including thyroid cancer, hepatocellular carcinoma and chronic myeloid leukemia. This isozyme is also a selenoprotein, containing the rare amino acid selenocysteine (Sec) at its active site. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2016]

Protein Families:

Druggable Genome, Secreted Protein

Protein Pathways:

Arachidonic acid metabolism, Glutathione metabolism

Product images: