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Product datasheet for TP762166

Glutathione Peroxidase 3 (GPX3) (NM_002084) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human glutathione peroxidase 3 (plasma) (GPX3), Gln21-Tyr72, with N-terminal His tag, expressed in E.coli, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the region(Gln21-Tyr72) of GPX3
Tag:	N-His
Predicted MW:	5.8 kDa
Concentration:	>0.05 μg/μL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50 mM Tris-HCl, pH 8.0, 8 M urea
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_002075
Locus ID:	2878
UniProt ID:	P22352
RefSeq Size:	1779
Cytogenetics:	5q33.1
RefSeq ORF:	678
Synonyms:	GPx-P; GSHPx-3; GSHPx-P

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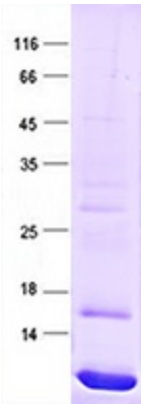
Summary: The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H2O2) by glutathione, and thereby protect cells against oxidative damage. Several isozymes of this gene family exist in vertebrates, 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:



Purified recombinant protein GPX3 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.