Recombinant Human GPX3 Protein, His-tagged

Cat. No. GPX3-2213H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GPX3 Protein (Gln21-Tyr72+Cys+Gly74-Lys226) with a N-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Gln21-Tyr72+Cys+Gly74-Lys226
Description	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.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 27.1 kDa Accurate Molecular Mass: 27 kDa
Endotoxin	<1.0 EU per 1μg (determined by the LAL method).
Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	GPX3 glutathione peroxidase 3 (plasma) [Homo sapiens (human)]
Official Symbol	GPX3

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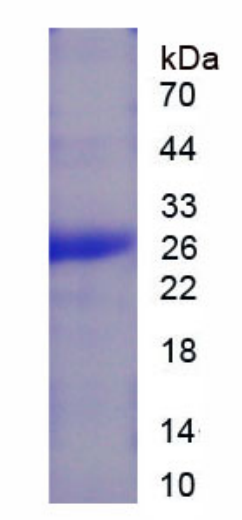
Synonyms	GPX3; glutathione peroxidase 3 (plasma); glutathione peroxidase 3; GPx-3; plasma glutathione peroxidase; extracellular glutathione peroxidase; GPx-P; GSHPx-3; GSHPx-P;
Gene ID	2878
mRNA Refseq	NM_002084
Protein Refseq	NP_002075
MIM	138321
UniProt ID	P22352



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