

# Recombinant human Glutathione Peroxidase 3/GPX3 (U73C) protein

Catalog Number: ATGP1429

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

21-226aa

### UniProt No.

P22352

### NCBI Accession No.

NP\_002075

### Alternative Names

Glutathione peroxidase 3, GPx-P, GSHPx-3, GSHPx-P, Extracellular glutathione peroxidase, Plasma glutathione peroxidase, GPXP, Selenoprotein GPX3

## PRODUCT SPECIFICATION

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### Molecular Weight

25.7 kDa (227aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.15M NaCl, 1mM DTT, 50mM Imidazole

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

GPX3, also known as glutathione peroxidase 3, belongs to the glutathione peroxidase family, which functions in the detoxification of hydrogen peroxide. GPX3 protects cells and enzymes from oxidative damage, by catalyzing the reduction of hydrogen peroxide, lipid peroxides and organic hydroperoxide, by glutathione. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by the nonsense (stop) codon TGA. Recombinant human GPX3 (u73C)

# Recombinant human Glutathione Peroxidase 3/GPX3 (U73C) protein

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protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography

## Amino acid Sequence

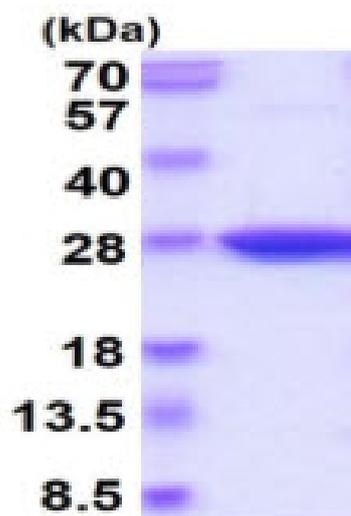
<MGSSHHHHHH SSGLVPRGSH M>QSRGQEKSK MDCHGGISGT IYEGALTID GEEYIPFKQY AGKYVLFVNV  
ASYCGLTGQY IELNALQEEL APFGLVILGF PCNQFGKQEP GENSEILPTL KYVRPGGGFV PNFQLFEKGD VNGEKEQKFY  
TFLKNSCPPT SELLGTSDDL FWEPMKVHDI RWNFEKFLVG PDGIPIMRWH HRTTVSNVKM DILSYMRRQA ALGVKRR

## General References

Esworthy R.S., et al. (1991) Arch. Biochem. Biophys. 286:330-336  
Comhair S.A.A., et al. (2000) Am. J. Respir. Cell Mol. Biol. 23:350-354

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)