

# Recombinant human Glutathione S-Transferase pi 1/GSTP1 protein

Catalog Number: ATGP0341

## PRODUCT INFORMATION

### Expression system

E.coli

### Domain

1-210aa

### UniProt No.

P09211

### NCBI Accession No.

NP\_000843

### Alternative Names

SERPINF1, Serpin peptidase inhibitor clade F member 1, Proliferation inducing protein 35, Pigment epithelium-derived factor EPC 1, Pigment epithelium-derived factor, PIG35, PI, GSTP1, GST3, Glutathione S-Transferase Pi 1, Glutathione S-transferase P Fatty Acid Ethyl Ester Synthase III, Glutathione S-transferase P, Glutathione S Transferase Pi, FAEES3, EPC1, DFN7, APF0619

## PRODUCT SPECIFICATION

### Molecular Weight

27.4 kDa (246aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.0) containing 30% glycerol, 1mM EDTA, 0.1mM PMSF.

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Specific activity is > 80unit/mg, and is defined as the amount of enzyme that conjugate 1.0 umole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### 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.

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## BACKGROUND

### Description

GSTP1 is a glutathione S-transferase that belongs to the pi class. This enzyme acts by catalyzing the reaction of glutathione with an acceptor molecule to form an S-substituted glutathione (S=sulfur). The reactions utilizing glutathione contribute the transformation of a wide variety of electrophiles, including reactive products of lipid, protein, carcinogens, therapeutic drugs, environmental toxins, and products of oxidative stress. Recombinant GSTP1 protein was expressed in E. coli and purified by using conventional chromatography techniques.

### Amino acid Sequence

<MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGS>MPPY TVVYFPVRGR CAALRMLLAD QGQSWKEEVV TVETWQEGSL KASCLYGQLP KFQDGDLTLY QSNTILRHLG RTLGLYGKDQ QEAAVLDMVN DGVEDLRCKY ISLIYTNYEA GKDDYVKALP GQLKPFETLL SQNQGGKTFI VGDQISFADY NLLDLLLIHE VLAPGCLDAF PLLSAYVGRL SARPKLKAFL ASPEYVNLPI NGNGKQ

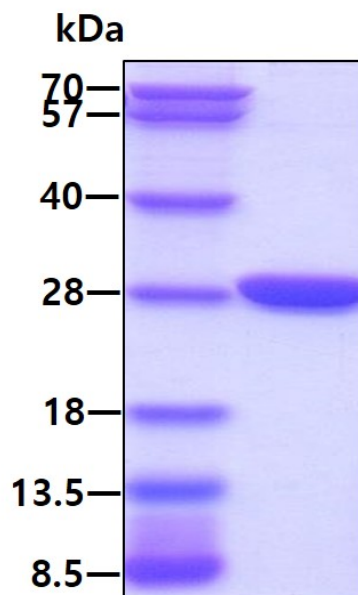
### General References

Lee KA, et al. (2001) Blood. 98(12):3483-5.

Hayes JD, et al. (1995) Crit Rev Biochem Mol Biol. 30(6):445-600.

## DATA

### SDS-PAGE



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