Recombinant human Glutathione Peroxidase 2/GPX2 (U40C) protein

Catalog Number: ATGP1325

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-190aa

UniProt No.
P18283

NCBI Accession No.
NP_002074

Alternative Names
Glutathione peroxidase 2, GI-GPx, GPRP, GSHPx-2, GSHPX-GI, Selenoprotein GPX2, Gastrointestinal glutathione peroxidase

PRODUCT SPECIFICATION

Molecular Weight
24.1 kDa (210aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 40% glycerol, 0.15M NaCl, 1mM DTT

Purity
> 95% 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

Description
GPX2, also known as glutathione peroxidase 2, belongs to the glutathione peroxidase family, consisting of eight known glutathione peroxidases (Gpx1-8) in humans. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. GPX2 could play a major role in protecting mammals from the toxicity of ingested organic hydroperoxides. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of

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glutathione peroxidase and is coded by the nonsense (stop) codon TGA. Recombinant human GPX2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

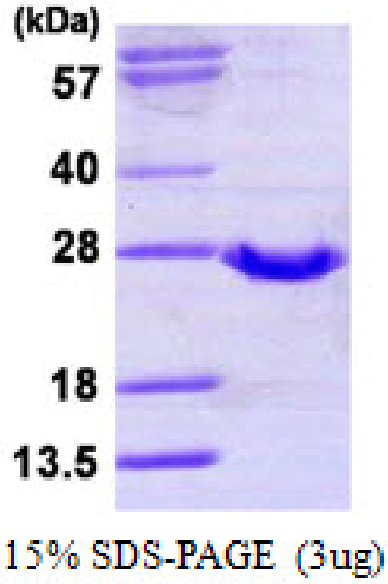
MGSSHHHHHH SSGLVPRGSH MAFIAKSFYD LSAISLDGEK VDFNTFRGRA VLIENVASLC GTTTRDFTQL NELQCRFPRR LVVLGFPCNQ FGHQENCQNE EILNSLKYVR PGGGYQPTFT LVQKCEVNGQ NEHPVFAYLK DKLPYPYDDP FSLMTDPKLI IWSPVRRSDV AWNFEKFLIG PEGEPFRRYS RTFPTINIEP DIKRLLKVAI

General References

Chu F.-F., et al. (1993) J. Biol. Chem. 268:2571-2576
Kelner M.J., et al. (2000) Gene. 248:109-116

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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