

Recombinant Human Gutathione Proxidase 2 (gastrointestinal), His-tagged

Cat. No. GPX2-1325H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GPX2(u40C), 1-190aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	1-190 a.a.
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 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.
Form	Liquid
Molecular Mass	24.1 kDa (210aa), confirmed by MALDI-TOF
AA Sequence	1-190aa

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Purity	>95% by SDS-PAGE.
Storage	Can be stored at 4oC short term (1-2 weeks). For long term storage, aliquot and store at -20oC or - 70oC. Avoid repeated freezing and thawing cycles.
Concentration	0.25 mg/ml (determined by Bradford assay)
Storage Buffer	20mM Tris-HCl buffer (pH7.5) containing 40% glycerol, 0.15M NaCl, 1mM DTT

GENE INFORMATION

Gene Name	GPX2 glutathione peroxidase 2 (gastrointestinal) [Homo sapiens]
Official Symbol	GPX2
Synonyms	GPX2; glutathione peroxidase 2 (gastrointestinal); glutathione peroxidase 2; GSHPX GI; glutathione peroxidase-gastrointestinal; glutathione peroxidase-related protein 2; gastrointestinal glutathione peroxidase 2; GPRP; GPx-2; GI-GPx; GPRP-2; GPx-GI; GSHPx-2; GSHPX-GI;
Gene ID	2877
mRNA Refseq	NM_002083
Protein Refseq	NP_002074
MIM	138319
UniProt ID	P18283
Chromosome Location	14q24.1

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Pathway

Arachidonic acid metabolism, organism-specific biosystem; Arachidonic acid metabolism, conserved biosystem; Folate Metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Selenium Metabolism and Selenoproteins, organism-specific biosystem;

Function

electron carrier activity; glutathione peroxidase activity; oxidoreductase activity;

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