

## Product datasheet for **AR50150PU-N**

### Glutathione peroxidase 2 / GPX2 (1-190, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Glutathione peroxidase 2 / GPX2 (1-190, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MAFIAKSFYD LSAISLDGEK VDFNTFRGRA VLIENVASLC GTTTRDFTQL NELQCRFRR LVLGFPCNQ FGHQENCQNE EILNSLKYVR PGGGYQPTFT LVQKCEVNGQ NEHPVFAYLK DKLPYPYDDP FSLMTDPKLI IWSPVRRSDV AWNFEKFLIG PEGEPFRRYS RTFPTINIEP DIKRLKVAI
Tag:	His-tag
Predicted MW:	24.1 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 7.5) containing 40% glycerol, 0.15M NaCl, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human GPX2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_002074</a>
Locus ID:	2877
UniProt ID:	<a href="#">P18283</a>
Cytogenetics:	14q23.3
Synonyms:	GPx-2, GSHPx-2, GPRP, Gastrointestinal glutathione peroxidase



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**Summary:**

The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) 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 predominantly expressed in the gastrointestinal tract (also in liver in human), is localized in the cytoplasm, and whose preferred substrate is hydrogen peroxide. Overexpression of this gene is associated with increased differentiation and proliferation in colorectal cancer. 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. [provided by RefSeq, Jul 2016]

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Arachidonic acid metabolism, Glutathione metabolism

**Product images:**