

GPX1 (U49C), 1-203aa, Human, His tag, E.coli**Cat.NO.: TP02326**

3th Edition

Synonyms:Glutathione peroxidase 1, GSHPX1

Description:GPX1 (Glutathione peroxidase 1) 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. The GPX1 is part of the enzymatic antioxidant defence, preventing oxidative damage to DNA, proteins and lipids by detoxifying hydrogen and lipid peroxides that may contribute to prostate cancer development. 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 GPX1(U49C) protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 30% glycerol, 100mM NaCl

Molecular Weight:24.2kDa (223aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHHSSGLVPRGSHMCAARLAAAAAAQSVYAFSARPLAGGEPVSLGSLRGKVLLIENVASLCGTTVRD
YTQMNELQRRLLGPRGLVVLGFPCNQFGHQENAKNEEILNSLKYVRPGGGFEPNFMLEKCEVNGAGAHPLFAFLR
EALPAPSDDATALMTDPKLITWSPVCRNDVAWNFEKFLVGPDGVPLRRYSRRFQTIDIEPDIEALLSQGPSCA

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.