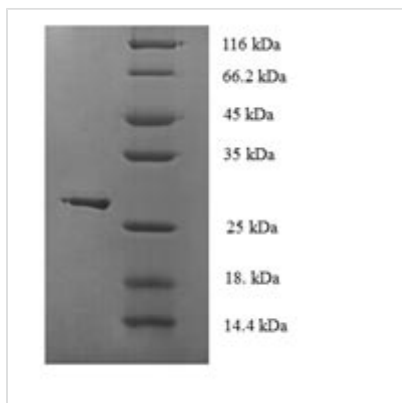




Recombinant Human Glutathione peroxidase 1 (GPX1) (U49S)

Product Code	CSB-EP009866HU
Relevance	Protects the hoglobin in erythrocytes from oxidative breakdown.
Abbreviation	Recombinant Human GPX1 protein (U49S)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P07203
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MCAARLAAAAAAAAQSVYAFSARPLAGGEPVSLGSLRGKVLLIENVASLSGTTV RDYTQMNELQRRRLGPRGLVVLGFPCNQFGHQENAKNEEILNSLKYVRPGGGF EPNFMLFEKCEVNGAGAHPLFAFLREALPAPSDDATALMTDPKLITWSPVCRN DVAWNFEKFLVGPDGVPLRRYSRRFQTIDIEPDIEALLSQGPSCA
Source	E.coli
Target Names	GPX1
Protein Names	Recommended name: Glutathione peroxidase 1 Short name= GPx-1 Short name= GSHPx-1 EC= 1.11.1.9Alternative name(s): Cellular glutathione peroxidase
Expression Region	1-203aa(U49S)
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	26.1kDa
Protein Length	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Amino acids 1-203(U49S) constitute the expression domain of recombinant Human GPX1. The calculated molecular weight for this GPX1 protein is 26.1 kDa. This GPX1 protein is produced using e.coli expression system. The GPX1 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant GPX1 protein during the following stages.

Human glutathione peroxidase 1 (GPX1) is a key antioxidant enzyme that plays a crucial role in protecting cells from oxidative damage. GPX1 belongs to the family of glutathione peroxidases, and its primary function is to catalyze the reduction of hydrogen peroxide and organic hydroperoxides using glutathione as a reducing agent. By scavenging reactive oxygen species (ROS), GPX1 helps maintain cellular redox balance and protects biomolecules such as lipids and DNA from oxidative stress. GPX1 is widely distributed in various tissues, with particularly high levels in the liver. Understanding the function of GPX1 is essential for unraveling the complex interplay between antioxidants and oxidative stress, providing insights into potential therapeutic strategies for conditions associated with oxidative damage.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.