



Recombinant Mouse Phospholipid hydroperoxide glutathione peroxidase, nuclear (Gpx4)

Product Code	CSB-YP835590MO
Abbreviation	Gpx4
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.	Q91XR9
Product Type	Recombinant Protein
Purity	>85% (SDS-PAGE)
Sequence	MGRAAARKRG RCRQRGGSPR GRRRRGPGRQ SPRKRPGPRR RKARARRRRR ARPRRMEPIP EPFNPGLLQ EPPQYCNSSE FLGLCASRDD WRCARSMHEF SAKDIDGHMV CLDKYRGFVC IVTNVASQUG KTDVNYTQLV DLHARYAECG LRILAFPCNQ FGRQEPGSNQ EIKEFAAGYN VKFDMYSKIC VNGDDAHLW KWMKVQPKGR GMLGNAIKWN FTKFLIDKNG CEVKRYGPME EPQVIERDLP CYL
Source	Yeast
Target Names	Gpx4
Protein Names	Recommended name: Phospholipid hydroperoxide glutathione peroxidase, nuclear EC= 1.11.1.12 Alternative name(s): Glutathione peroxidase 4 Short name= GPx-4 Short name= GSHPx-4
Expression Region	1-253
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	Glutathione peroxidase catalyzes the reduction of hydrogen peroxide, organic hydroperoxide, and lipid peroxides by reduced glutathione and functions in the protection of cells against oxidative damage. Human plasma glutathione peroxidase has been shown to be a selenium-containing enzyme and the UGA codon is translated into a selenocysteine. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, experimental evidence for alternative splicing exists; alternative transcription initiation and the cleavage sites of the mitochondrial and nuclear transit peptides need to be experimentally verified.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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.