



Recombinant Rat Glutathione peroxidase 1 (Gpx1)

Product Code	CSB-MP009866RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P04041
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	MSAARLSAVA QSTVYAFSAR PLAGGEPVSL GSLRGKVLLI ENVASLUGTT TRDYTEMNDL QKRLGPRGLV VLGFPQNFQ HQENGNKNEEI LNSLKYVRPG GGFEPNFTLF EKCEVNGEKA HPLFTFLRNA LPAPSDDPTA LMTDPKYIIW SPVCRNDISW NFEKFLVGPD GVPVRRYSRR FRTIDIEPDI EALLSKQPSN P
Source	Mammalian cell
Target Names	Gpx1
Protein Names	Recommended name: Glutathione peroxidase 1 Short name= GPx-1 Short name= GSHPx-1 EC= 1.11.1.9 Alternative name(s): Cellular glutathione peroxidase
Expression Region	1-201
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	This gene encodes a member of the glutathione peroxidase family. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. 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 UGA, that normally functions as a translation termination codon. In addition, this protein is characterized in a polyalanine sequence polymorphism in the N-terminal region, which includes three alleles with five, six or seven alanine (ALA) repeats in this sequence. The allele with five ALA repeats is significantly associated with breast cancer risk. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.
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.