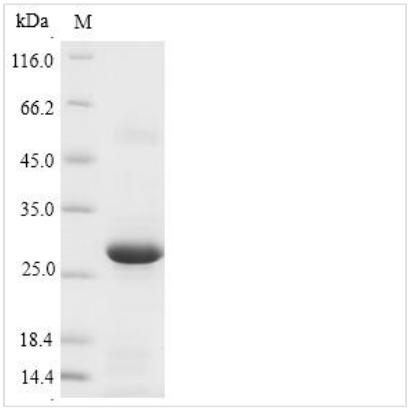
Recombinant Pig Epididymal secretory glutathione peroxidase (GPX5)

Product Code	CSB-EP009870PI
Relevance	May constitute a glutathione peroxidase-like protective system against peroxide damage in sperm membrane lipids. Since the purified porcine enzyme has very little activity towards hydrogen peroxide or organic hydroperoxides the protective effect is not likely to be exerted by its enzymatic activity. Instead, may protect sperm from premature acrosome reaction in the epididymis by binding to lipid peroxides, which might otherwise interact with phospholipase A2 and induce the acrosome reaction.
Abbreviation	Recombinant Pig GPX5 protein
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.	O18994
Alias	Epididymis-specific glutathione peroxidase-like protein Short name:EGLP
Product Type	Recombinant Protein
Immunogen Species	Sus scrofa (Pig)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	NSNLEKMDCYKDVTGTIYDYDAFTLNGNEHIQFKQYAGKHVLFVNVATYCGLT AQYPELNTLQEELKPFGLVVLGFPCNQFGKQEPGENSEILLGLKYVRPGGGYV PNFQLFEKGDVNGEKEQKVFTFLKHSCPHPSELIGSIGYISWEPIRVHDIRWNF EKFLVGPDGVPVMRWVHETPISTVKSDILAYLKQFKTE
Research Area	Signal Transduction
Source	E.coli
Target Names	GPX5
Protein Names	Recommended name: Epididymal secretory glutathione peroxidase EC= 1.11.1.9 Alternative name(s): Epididymis-specific glutathione peroxidase-like protein Short name= EGLP Glutathione peroxidase 5 Short name= GPx-5 Short
Expression Region	22-219aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	27.6kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

The gene responsible for the Pig GPX5 protein (22-219aa) is incorporated into a plasmid vector, forming recombinant plasmid. The resulting recombinant plasmid is introduced into e.coli cells, from which cells survive in the presence of a specific antibiotic are selected. The selected e.coli cells containing the recombinant plasmid are cultured under conditions that facilitate the expression of the gene of interest. A N-terminal 10xHis tag and C-terminal Myc tag is linked to the protein. After expression, affinity purification is used to isolate and purify the recombinant Pig GPX5 protein from the cell lysate. Denaturing SDS-PAGE is employed to resolve the resulting recombinant Pig GPX5 protein, revealing a purity greater than 90%.

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

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