



# Recombinant Bovine Thioredoxin-dependent peroxide reductase, mitochondrial (PRDX3)

<b>Product Code</b>	CSB-MP018656BO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P35705
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	PAVTQHA PYFKGTAVVS GEFKEISLDD FKGKYLVLFF YPLDFTFVCP TEIIAFSDKA SEFHDVNCEV VAVSVDSHFS HLAWINTPRK NGGLGHMNIA LLSDLTKQIS RDYGVLLGEP GLALRGLFII DPNGVIKHLV VNDLPVGRSV EETLRLVKAF QFVEAHGEVC PANWTPESPT IKPHPTASRE YFEKVNQ
<b>Source</b>	Mammalian cell
<b>Target Names</b>	PRDX3
<b>Protein Names</b>	Recommended name: Thioredoxin-dependent peroxide reductase, mitochondrial EC= 1.11.1.15 Alternative name(s): Antioxidant protein 1 Short name= AOP-1 Peroxiredoxin-3 Protein SP-22
<b>Expression Region</b>	64-257
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This gene encodes a protein with antioxidant function and is localized in the mitochondrion. This gene shows significant nucleotide sequence similarity to the gene coding for the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase. Expression of this gene product in E. coli deficient in the C22-subunit gene rescued resistance of the bacteria to alkylhydroperoxide. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologues suggest that these genes consist of a family that is responsible for regulation of cellular proliferation, differentiation, and antioxidant functions. Two transcript variants encoding two different isoforms have been found for this gene.
<b>Reconstitution</b>	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.