



# Recombinant Mouse Protein disulfide-isomerase (P4hb)

<b>Product Code</b>	CSB-MP017342MO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P09103
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	D ALEEEDNVLV LKKSNFEEAL AAHKYLLVEF YAPWCGHCKA LAPEYAKAAA KLKAEGSEIR LAKVDATEES DLAQQYGVRG YPTIKFFKNG DTASPKEYTA GREADDIVNW LKKRTGPAAT TLSDTAAAES LVDSSEVTVI GFFKDVESDS AKQFLAAEA IDDIPFGITS NSGVFSKYQL DKDGVVLFKK FDEGRNNEG EITKEKLLDF IKHNQLPLVI EFTEQTAPKI FGGEIKTHIL LFLPKSVSDY DGKLSSFKRA AEGFKGKILF IFIDSDHTDN QRILEFFGLK KEECPAVRLI TLEEEMTKYK PESDELTAEK ITEFCHRFLK GKIKPHLMSQ EVPEDWDKQP VKVLVGANFE EVAFDEKKNV FVEFYAPWCG HCKQLAPIWD KLGETYKDHE NIIIAKMDST ANEVEAVKVH SFPTLKFFPA SADRTVIDYN GERTLDGFKK FLESGGQDGA GDDLEDLLEE ALEPDMEEDD DQKAVKDEL
<b>Source</b>	Mammalian cell
<b>Target Names</b>	P4hb
<b>Protein Names</b>	Recommended name: Protein disulfide-isomerase Short name= PDI EC= 5.3.4.1 Alternative name(s): Cellular thyroid hormone-binding protein Endoplasmic reticulum resident protein 59 Short name= ER protein 59 Short name=
<b>Expression Region</b>	20-509
<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 the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, this enzyme is involved in hydroxylation of prolyl residues in procollagen. This enzyme is also a disulfide isomerase containing two thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Other known functions include its ability to act as a chaperone that inhibits aggregation of misfolded proteins in a concentration-dependent manner, its ability to bind thyroid hormone, its role in both the influx and efflux of S-nitrosothiol-bound nitric oxide, and its function as a subunit of the microsomal triglyceride transfer



protein complex.

---

**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.