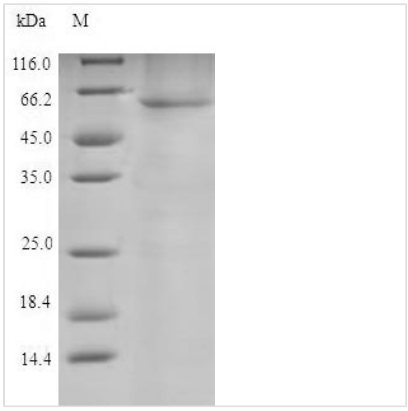
Recombinant Cricetulus griseus Protein disulfide-isomerase (P4HB)

Product Code	CSB-EP823188DXU
Relevance	This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP. Receptor for LGALS9; the interaction retains P4HB at the cell surface of Th2 T helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane redox state and enhancing cell migration.
Abbreviation	Recombinant Cricetulus griseus ACTB 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.	Q8R4U2
Alias	Short name: PDI Alternative name(s): Prolyl 4-hydroxylase subunit beta p58
Product Type	Recombinant Protein
Immunogen Species	Cricetulus griseus (Chinese hamster) (Cricetulus barabensis griseus)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	DAPEEEDNVLVLKKSNFAEALAAHNYLLVEFYAPWCGHCKALAPEYAKAAAKL KAEGSEIRLAKVDATEESDLAQQYGVRGYPTIKFFKNGDTASPKEYTAGREAD DIVNWLKKRTGPAATTLSDTAAAETLIDSSEVAVIGFFKDVESDSAKQFLLAAEA VDDIPFGITSNSGVFSKYQLDKDGVVLFKKFDEGRNNFEGEVTKEKLLDFIKHN QLPLVIEFTEQTAPKIFGGEIKTHILLFLPKSVSDYDGKLGNFKKAAEGFKGKILFI FIDSDHTDNQRILEFFGLKKEECPAVRLITLEEEMTKYKPESDELTAEKITEFCH RFLEGKIKPHLMSQELPEDWDKQPVKVLVGKNFEEVAFDEKKNVFVEFYAPW CGHCKQLAPIWDKLGETYKDHENIIIAKMDSTANEVEAVKVHSFPTLKFFPATA DRTVIDYNGERTLDGFKKFLESGGQDGAGDDDDVDLEEALEPDMEEDDDQKA VKDEL
Research Area	Signal Transduction
Source	E.coli
Target Names	P4HB

Protein Names	Recommended name: Protein disulfide-isomerase Short name= PDI EC= 5.3.4.1 Alternative name(s): Prolyl 4-hydroxylase subunit beta p58
Expression Region	20-509aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	59.0kDa
Protein Length	Full Length of Mature Protein
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
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.