

## Recombinant Mouse P4hb Protein, His-tagged

Cat. No. P4hb-7294M Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Mouse P4hb protein with a His tag was expressed in insect cells.

**Species** Mouse

**Source** Insect Cells

**ProteinLength** 20-509

#### Description

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.

**Form** Liquid

**Molecular Mass** 56.1 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**AA Sequence**

DALEEDNVLVLKKSNFEEALAAHKYLLVEFYAPWCGHCKALAPEYAKAAAKLKAEG  
 SEIRLAKVDATEESDLAQQYGVRGYPTIKFFKNGDTASPKEYTAGREADDIVNWLKK  
 RTGPAATTLSDTAAAESLVDSSEVTVIGFFKDVESDSAKQFLAAEAIDDIPFGITSNS  
 GVFSKYQLDKDGVVLFKKFDEGRNNFEGETEKEKLLDFIKHNQLPLVIEFTEQTAPKIF  
 GGEIKTHILLFLPKSVSDYDGKLSSEFKRAAEGFKGKILFIFIDSDHTDNQRILEFFGLKK  
 EECPAVRLITLLEEEMTKYKPEDELTAEKITEFCHRFLGKIKPHLMSQEVDPEDWDK  
 QPVKVLVGANFEEVAFDEKKNVFEFYAPWCGHCKQLAPIWDKLGETYKDHENIIIA  
 KMDSTANEVEAVKVHSFPTLKFFPASADRTVIDYNGERTLDGFKKFLGSGGQDGAG  
 DDEDLDLEEALPDMEEDDDQKAVKDELLEHHHHHH

**Endotoxin** < 1.0 EU/μg of protein (determined by LAL method)

**Purity** > 95 % by SDS-PAGE

**Stability** Shelf life: one year from despatch.

**Storage** Store undiluted at 2-8 centigrade for one week or (in aliquots) at -20 to -80 centigrade for longer. Avoid repeated freezing and thawing.

**Concentration** 0.5 mg/mL (determined by absorbance at 280nm)

**Storage Buffer** Phosphate Buffered Saline (pH 7.4) containing 10 % glycerol.

## GENE INFORMATION

**Gene Name** P4hb prolyl 4-hydroxylase, beta polypeptide [ *Mus musculus* (house mouse) ]

**Official Symbol** P4hb

**Synonyms** P4hb; prolyl 4-hydroxylase, beta polypeptide; P; Pd; ERp; PDI; Thb; Thbp; ERp59; Pdia1; protein disulfide-isomerase; ER protein 59; cellular thyroid hormone-binding

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

protein; endoplasmic reticulum resident protein 59; p55; prolyl 4-hydroxylase subunit beta; EC 5.3.4.1

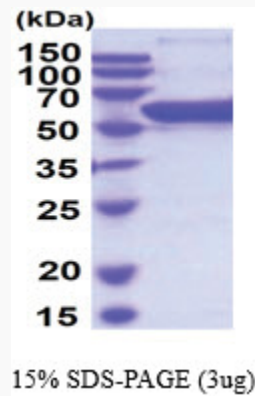
**Gene ID** 18453

**mRNA Refseq** NM\_011032

**Protein Refseq** NP\_035162

**UniProt ID** P09103

**SDS-PAGE**



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA