

# Recombinant human P4HB protein

Catalog Number: ATGP3136

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

18-508aa

### UniProt No.

P07237

### NCBI Accession No.

NP\_000909

### Alternative Names

Prolyl 4-hydroxylase subunit beta, P4Hbeta, PDI, PDIA1, PHD, PO4DB, PO4HB; ERBA2L, Protein disulfide-isomerase, Cellular thyroid hormone-binding protein, p55

## PRODUCT SPECIFICATION

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### Molecular Weight

57.5 kDa (521aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Biological Activity

Specific activity > 100 A650/cm/min/mg. Enzymatic activity was confirmed by measuring the aggregation of insulin in the presence of DTT.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

P4HB, prolyl 4 hydroxylase subunit beta, is a multifunctional and highly abundant enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits,

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this enzyme is involved in hydroxylation of prolyl residues in procollagen. This protein is also a disulfide isomerase containing two thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Recombinant human P4HB protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography.

## Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MDAPEEEDHV LVLRSNFAE ALAAHKYLLV EFYAPWCGHC KALAPEYAKA AGKLKAEGSE IRLAKVDATE ESDLAQQYGV RGYPTIKFFR NGDTASPKEY TAGREADDIV NWLKKRTGPA ATTLPDGAAA ESLVESSEVA VIGFFKDVES DSAKQLQAA EAIDDIPFGI TSNSDVFSKY QLDKDGVLF KKFDEGRNNF EGEVTKENLL DFIKHNQLPL VIEFTEQTAP KIFGGEIKH ILLFLPKSVS DYDGKLSNFK TAAESFKGKI LFIFIDSDHT DNQRILEFFG LKKEECPAVR LITLEEEMTK YKPESEELTA ERITFCHRF LEGKIKPHLM SQELPEDWDK QPVKVLVGKN FEDVAFDEKK NVFVEFYAPW CGHCKQLAPI WDKLGETYKD HENIVIAKMD STANEVEAVK VHSFPTLKFF PASADRTVID YNGERTLDGF KKFLES GGQD GAGDDDDLED LEEAEPPDME EDDDQKAVKD EL

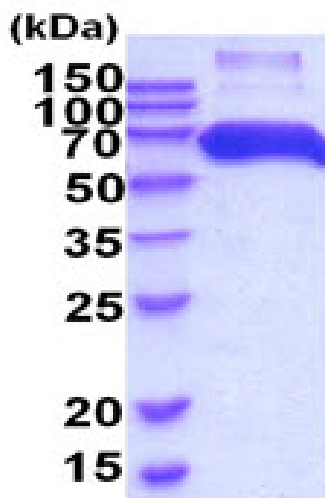
## General References

Pfander D., et al. (2006) *Am J Pathol.* 169(2):491-502.

Kivirikko KI., et al. (1991) *J Hepatol.* 13 Suppl 3:S2-7.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)