

## 32-6867: P4HB Human, Active

**Application :** Functional Assay

**Alternative Name :** P4Hbeta, PDI, PDIA1, PHD, PO4DB, PO4HB, ERBA2L.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

P4HB is a multifunctional and highly abundant enzyme that is part of the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, P4HB has a role in hydroxylation of prolyl residues in procollagen. P4HB is a disulfide isomerase containing two thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds.

P4HB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 512 amino acids (18-508 a.a.) and having a molecular mass of 57.5kDa. The P4HB is fused to a 21 amino acid His Tag and purified by conventional chromatography.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** The P4HB 1mg/ml protein solution contains 20mM Tris-HCl pH-8, and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MDAPEEEDHV LVLKSNFAE ALAAHKYLLV EFYAPWCGHC  
KALAPEYAKA AGKLKAEGSE IRLAKVDATE ESDLAQQYGV RGYPTIKFFR NGDTASPKY TAGREADDIV  
NWLKKRTGPA ATTLPDGAAA ESLVESSEVA VIGFFKDVES DSAKQLQAA EAIDDIPFGI TSNSDVFSKY  
QLDKDGVVLF KKFDEGRNMF EGEVTKENLL DFIKHNQLPL VIEFTEQTAP KIFGGEIKTH ILLFLPKSVS  
DYDGKLSNFK TAAESFKGKI LFIFIDSDHT DNQRILEFFG LKKEECPAVR LITLEEEMTK YKPESEELTA  
ERITEFCHRF LEGKIKPHLM SQELPEDWDK QPVKVLVGKN FEDVAFDEKK NVFVEFYAPW CGHCKQLAPI  
WDKLGETYKD HENIVIAKMD STANEVEAVK VHSFPTLKFF PASADRTVID YNGERTLDGF KKFLES GGQD  
GAGDDDDLED LEEAEPPDME EDDQKAVKD EL.

### Application Note

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