

## 32-2651: PDI Recombinant Protein

**Alternative Name :** Protein Disulfide Isomerase,PDI,EC 5.3.4.1,Prolyl 4-hydroxylase subunit beta,Cellular thyroid hormone-binding protein,p55,P4HB,ERBA2L,PDIA1,PO4DB,DSI,GIT,PHDB,PO4HB,PROHB,P4Hbeta.

### Description

Source : Escherichia Coli. PDI Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 503 amino acids and having a molecular mass of 62.4 kDa. The PDI is fused to a 12 amino acid His tag (515 a.a. total) at N-terminal and purified by proprietary chromatographic techniques. Protein disulfide isomerases (PDIs) constitute a family of structurally related enzymes which catalyze disulfide bonds formation, reduction, or isomerization of newly synthesized proteins in the lumen of the endoplasmic reticulum (ER). They act also as chaperones, and are, therefore, part of a quality-control system for the correct folding of the proteins in the same subcellular compartment. PDI has been found to have moderate effects (25-fold) on the rate of oxidative folding of proteins in vitro. Recombinant Human Protein Disulfide Isomerase is involved in disulphide-bond formation and isomerization, as well as the reduction of disulphide bonds in proteins. Recombinant PDI has been found to have moderate effects (25-fold) on the rate of oxidative folding of proteins in vitro.

### Product Info

**Amount :** 0.5 mg  
**Purification :** Greater than 95.0% as determined by a) Analysis by RP-HPLC. b) Analysis by SDS-PAGE.  
**Content :** The PDI protein (1mg/ml) solution was lyophilized from PBS pH-7.  
**Storage condition :** Lyophilized Protein Disulfide Isomerase although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Human PDI should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.  
**Amino Acid :** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Arg-Arg-Ala.

### Application Note

It is recommended to reconstitute the lyophilized PDI in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

