



Product Datasheet

Product Name	Protein Disulfide Isomerase Human Recombinant
Cata No	CB500442
Source	<i>Escherichia Coli.</i>
Synonyms	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

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. Protein Disulfide Isomerase Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 508 amino acids and having a molecular mass of 57116 Dalton. The PDI contains N-terminal 6xHis-tag and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

The protein (1mg/ml) was lyophilized with 50mM potassium phosphate buffer pH=7.5.

Stability

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.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Arg-Arg-Ala