Creative Enzymes®

Protein Disulfide Isomerase from Human, Recombinant

Cat. No. NATE-0913

Lot. No. (See product label)

Introduction

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.

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

Product Information

Species Human

Source E. coli

Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

EC Number EC 5.3.4.1

CAS No. 37318-49-3

Molecular Weight 62.4 kDa

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

Buffer The PDI protein (1mg/ml)solution was lyophilized from PBS pH-7.

Storage and Shipping Information

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.