



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
San Diego, CA 92121
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<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human PPIF Protein
Catalog Number: hRP-0843
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human peptidylprolyl isomerase F (PPIF) gene is a member of the peptidyl-prolyl cis-trans isomerase (PPIase) family. PPIases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and accelerate the folding of proteins. This protein is part of the mitochondrial permeability transition pore in the inner mitochondrial membrane. Activation of this pore is thought to be involved in the induction of apoptotic and necrotic cell death.

Full-length human PPIF (207 aa) gene was constructed with 15 aa N-terminal T7 tag and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: PPIF (Cyp-D; CYP3)
Accession Number: NP_005720
Species: Human
Size: 50 µg / Vial
Composition: 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Lin,D.T. et al., *Mitochondrial targeted cyclophilin D protects cells from cell death by peptidyl prolyl isomerization*. J. Biol. Chem. 277 (34), 31134-31141 (2002)

Crompton,M., et al., *Cyclophilin-D binds strongly to complexes of the voltage-dependent anion channel and the adenine nucleotide translocase to form the permeability transition pore*.



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Eur. J. Biochem. 258 (2), 729-735 (1998)

Applications

1. May be used for in vitro mitochondrial mediated cell apoptosis regulation study with intracellular delivery of this protein.
2. As soluble / native protein, may be used as enzymatic substrate protein for kinase and ubiquitin assay development.
3. May be used for mapping PPIF protein-protein interaction.
4. May be used as antigen for specific antibody development.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFMLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVY
LDVDANGKPLGRVVLELKADVVPKTAENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHN
GTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTNGSQFFICTIKTDWLDGKHVVFGHVKEG
MDVVKKIESFGSKSGRTSKKIVITDCGQLS