

Recombinant Human Peptidylprolyl isomerase F

Cat. No. PPIF-120H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant PPIF protein was expressed in E.coli and purified by using conventional chromatography techniques, 21 kDa (198aa).
Species	Human
Source	E.coli
Description	Cyclophilin F (also known as Peptidylprolyl isomerase F, PPIF) is a member of peptidyl-prolyl cis-trans isomerase family. They are highly-conserved cytoplasmic enzymes that accelerate protein folding. 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.
Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH CSKGSGDPSS SSSSGNPLVY LDVDANGKPL GRVVLELKAD VVPKTAENFR ALCTGEKGFG YKGSTFHRVI PSFMCQAGDF TNHNGTGGKS IYGSRFPDEN FTLKHVGPV LSMANAGPNT NGSQFFICTI KTDWLDGKHV VFGHVKEGMD VVKKIESFGS KSGRTSKKIV ITDCGQLS
Formulation	Liquid in 20 mM Tris-HCl buffer (pH 7.5) containing 1 mM DTT 10% glycerol.
Purity	> 95% by SDS PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Biological activity	Specific activity is > 250 nmoles/min/mg, and is defined as the amount of enzyme that

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cleaves 1umole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH8.0 using chymotrypsin.

Activity Assay

1. Prepare 170ul assay buffer into a suitable container and pre-chill on ice before use: The final concentrations are 200 mM Tris-Hcl, pH 8.0, and 20nM chymotrypsin. 2. Add 10ul of recombinant Cyclophilin F (PPIF) protein with 1ug in assay buffer. 3. Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer. 4. Add 20ul pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM) 5. Record the increase in A405 nm for 30 minutes at 25°C.

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name PPIF peptidylprolyl isomerase F [[Homo](#)sapiens]

Synonyms PPIF; peptidylprolyl isomerase F; CYP3; Cyp-D; FLJ90798; MGC117207; peptidylprolyl isomerase F; PPIase; Rotamase; cyclophilin 3; cyclophilin D; cyclophilin F; OTTHUMP00000019925; peptidyl-prolyl cis-trans isomerase, mitochondrial; EC 5.2.1.8; hCYP3; peptidylprolyl isomerase F (cyclophilin F); peptidyl-prolyl cis-trans isomerase, mitochondrial

Gene ID 10105

mRNA Refseq [NM_005729](#)

Protein Refseq [NP_005720](#)

MIM [604486](#)

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UniProt ID	P30405
Chromosome Location	10q22-q23
Function	isomerase activity; peptide binding; peptidyl-prolyl cis-trans isomerase activity
PDBrendering based on 2bit.Available structures:2bit,2biu	

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