

PPIF

Recombinant Human Peptidylprolyl Isomerase F (aa 30-207)

Catalog No.	CRP275A CRP275B	Quantity:	100 µg 500 µg
Alternate Names:	Cyclophilin 3, Cyclophilin D, Cyclophilin F, CYP3, Cyp-D		
Gene ID:	10105		
Protein Accession No:	NP_005720		
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. Recombinant PPIF protein was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques.		
Concentration:	1 mg/ml (determined by Bradford assay)		
Source:	<i>E. coli</i>		
Molecular Weight:	21 kDa (198 aa), confirmed by MALDI-TOF		
Formulation:	Liquid in 20 mM Tris-HCl buffer (pH 7.5) containing 1 mM DTT 10% glycerol.		
Purity:	> 95% by SDS PAGE		
Endotoxin Level:	< 1.0 EU per 1 ug of protein (determined by LAL method)		
Biological Activity:	Specific activity is > 250 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 umole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl, pH8.0 using chymotrypsin.		
Amino Acid Sequence:	MGSSHHHHHH SSGLVPRGSH CSKGSGDPSS SSSSGNPLVY LDVDANGKPL GRVVLELKAD VVPKTAENFR ALCTGEKGFG YKGSTFHRVI PSFMCQAGDF TNHNGTGGKS IYGSRFPDEN FTLKHVGPV LSMANAGPNT NGSQFFICTI KTDWLDGKHV VFGHVKEGMD VVKKIESFGS KSGRTSKKIV ITDCGQLS		
Activity Assay:	1. Prepare 170 ul 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 20 nM chymotrypsin. 2. Add 10 ul of recombinant Cyclophilin F (PPIF) protein with 1 ug in assay buffer. 3. Mix by inversion and equilibrate to 1C and monitor the A405 nm until the value is constant using a spectrophotometer. 4. Add 20 ul pre-chilled 5 mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460 mM LiCl to a concentration of 3 mM) 5. Record the increase in A405 nm for 30 minutes at 25°C.		
Storage & Stability:	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		



15% SDS-PAGE (3 μ g)

(kDa)

40

28

18

8.5



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com