10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PPIF Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16334c

Specification

PPIF Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P30405
Other Accession	P29117, NP_005720.1
Reactivity	**Human**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22040**
Antigen Region	**103-131**

PPIF Antibody (Center) - Additional Information

Gene ID 10105

Other Names
Peptidyl-prolyl cis-trans isomerase F, mitochondrial, PPIase F, Cyclophilin D, CyP-D, CypD, Cyclophilin F, Mitochondrial cyclophilin, CyP-M, Rotamase F, PPIF, CYP3

Target/Specificity
This PPIF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-131 amino acids from the Central region of human PPIF.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PPIF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PPIF Antibody (Center) - Protein Information

Name PPIF

Synonyms CYP3

Function PPIase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:20676357). Involved in regulation of the mitochondrial permeability transition pore (mPTP) (PubMed:26387735). It is proposed that its association with the mPTP is masking a binding site for inhibiting inorganic phosphate (Pi) and promotes the open probability of the mPTP leading to apoptosis or necrosis; the requirement of the PPIase activity for this function is debated (PubMed:26387735). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced necrosis (PubMed:22726440). Involved in modulation of mitochondrial membrane F(1)F(0) ATP synthase activity and regulation of mitochondrial matrix adenine nucleotide levels (By similarity). Has anti-apoptotic activity independently of mPTP and in cooperation with BCL2 inhibits cytochrome c-dependent apoptosis (PubMed:19228691).

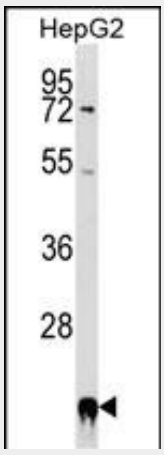
Cellular Location
Mitochondrion matrix

PPIF Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PPIF Antibody (Center) - Images



PPIF Antibody (Center) (Cat. #AP16334c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the PPIF antibody detected the PPIF protein (arrow).

PPIF Antibody (Center) - Background

PPIF 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.

PPIF Antibody (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
He, Y., et al. Invest. Ophthalmol. Vis. Sci. 49(11):4912-4922(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Lin, D.T., et al. J. Biol. Chem. 277(34):31134-31141(2002)
Bowles, K.R., et al. Genomics 67(2):109-127(2000)