

PPIF Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20712c

Specification

PPIF Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>P30405</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22040

PPIF Antibody (C-term) - Additional Information

Gene ID 10105

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

Target/Specificity

This PPIF antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 183-217 amino acids from the C-terminal region of human PPIF.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PPIF Antibody (C-term) - Protein Information

Name PPIF

Synonyms CYP3



Function PPlase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:<u>20676357</u>). Involved in regulation of the mitochondrial permeability transition pore (mPTP) (PubMed:<u>26387735</u>). 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 PPlase activity for this function is debated (PubMed:<u>26387735</u>). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced necrosis (PubMed:<u>22726440</u>). 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:<u>19228691</u>).

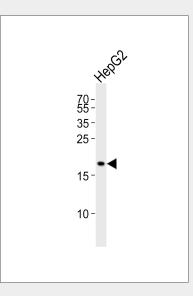
Cellular Location Mitochondrion matrix

PPIF Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PPIF Antibody (C-term) - Images



Western blot analysis of lysate from HepG2 cell line, using PPIF Antibody (C-term)(Cat. #AP20712c). AP20712c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

PPIF Antibody (C-term) - Background

PPlases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic



peptide bonds in oligopeptides. Involved in regulation of the mitochondrial permeability transition pore (mPTP). It is proposed that its association with the mPTP is masking a binding site for inhibiting inorganic phosphate (Pi) and promotes the open probablity of the mPTP leading to apoptosis or necrosis; the requirement of the PPIase activity for this function is debated. In cooperation with mitochondrial TP53 is involved in activating oxidative stress- induced necrosis. Involved in modulation of mitochondrial membrane F(1)F(0) ATP synthase activity and regulation of mitochondrial matrix adenine nucleotide levels. Has anti-apoptotic activity independently of mPTP and in cooperation with BCL2 inhibits cytochrome c-dependent apoptosis.

PPIF Antibody (C-term) - References

Bergsma D.J., et al.J. Biol. Chem. 266:23204-23214(1991). Deloukas P., et al.Nature 429:375-381(2004). Johnson N., et al.Eur. J. Biochem. 263:353-359(1999). Eliseev R.A., et al.J. Biol. Chem. 284:9692-9699(2009). Burkard T.R., et al.BMC Syst. Biol. 5:17-17(2011).