

Cyclophilin F Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51443

Specification

Cyclophilin F Antibody - Product Information

Application	WB, IP, ICC, E
Primary Accession	P30405
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22 KDa

Cyclophilin F Antibody - 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

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Cyclophilin F Antibody - 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](http://www.uniprot.org/citations/20676357)). Involved in regulation of the mitochondrial permeability transition pore (mPTP) (PubMed: [26387735](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26387735)). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced necrosis (PubMed: [22726440](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19228691)).

Cellular Location

Mitochondrion matrix

Cyclophilin F Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cyclophilin F Antibody - Images

Cyclophilin F Antibody - 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 probability of the mPTP leading to apoptosis or necrosis; the requirement of the PPlase 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.

Cyclophilin F Antibody - References

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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).