

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

---

**Cyclophilin F Antibody - Product Information**

Application	WB, IP, ICC, E
Primary Accession	<a href="#">P30405</a>
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, PPlase F, Cyclophilin D, CyP-D, CypD, Cyclophilin F, Mitochondrial cyclophilin, CyP-M, Rotamase F, PPIF, CYP3

**Dilution**

WB~~1:1000  
IP~~N/A  
ICC~~N/A  
E~~N/A

**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**

PPlase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:<a href="http://www.uniprot.org/citations/20676357" target="\_blank">20676357</a>). Involved in regulation of the mitochondrial permeability transition pore (mPTP) (PubMed:<a href="http://www.uniprot.org/citations/26387735" target="\_blank">26387735</a>). 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:<a

<http://www.uniprot.org/citations/26387735> target="\_blank">26387735</a>). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced necrosis (PubMed:<a href="http://www.uniprot.org/citations/22726440" target="\_blank">22726440</a>). 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:<a href="http://www.uniprot.org/citations/19228691" target="\_blank">19228691</a>).

#### **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**

PPIases 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 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.

### **Cyclophilin F Antibody - 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).