

PPIF / Cyclophilin F Antibody (aa86-135)

Rabbit Polyclonal Antibody Catalog # ALS15105

Specification

PPIF / Cyclophilin F Antibody (aa86-135) - Product Information

Application WB, IHC Primary Accession P30405

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 22kDa KDa

PPIF / Cyclophilin F Antibody (aa86-135) - Additional Information

Gene ID 10105

Other Names

Peptidyl-prolyl cis-trans isomerase F, mitochondrial, PPlase F, 5.2.1.8, Cyclophilin D, CyP-D, CypD, Cyclophilin F, Mitochondrial cyclophilin, CyP-M, Rotamase F, PPIF, CYP3

Target/Specificity

PPIF Antibody detects endogenous levels of total PPIF protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

PPIF / Cyclophilin F Antibody (aa86-135) is for research use only and not for use in diagnostic or therapeutic procedures.

PPIF / Cyclophilin F Antibody (aa86-135) - 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: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 PPlase activity for this function is debated (PubMed:26387735). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced





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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

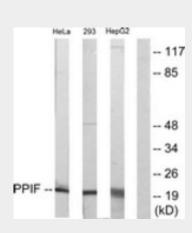
Volume 50 µl

PPIF / Cyclophilin F Antibody (aa86-135) - Protocols

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

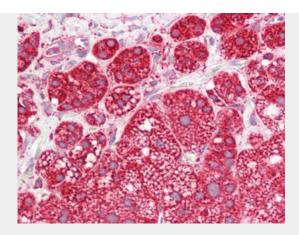
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PPIF / Cyclophilin F Antibody (aa86-135) - Images



Western blot of extracts from HepG2/HeLa/293 cells, using PPIF Antibody.





Anti-PPIF / Cyclophilin F antibody IHC of human adrenal.

PPIF / Cyclophilin F Antibody (aa86-135) - 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.

PPIF / Cyclophilin F Antibody (aa86-135) - References

Bergsma D.J.,et al.J. Biol. Chem. 266:23204-23214(1991). Ota T.,et al.Nat. Genet. 36:40-45(2004). Deloukas P.,et al.Nature 429:375-381(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Johnson N.,et al.Eur. J. Biochem. 263:353-359(1999).