

Cyclophilin F Polyclonal Antibody

Catalog # AP69368

Specification

Cyclophilin F Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host WB, IHC-P, IF
P30405
Human, Mouse, Rat
Rabbit
Polyclonal

Cyclophilin F Polyclonal Antibody - Additional Information

Gene ID 10105

Other Names

PPIF; CYP3; Peptidyl-prolyl cis-trans isomerase F; mitochondrial; PPIase F; Cyclophilin F; Rotamase F

Dilution

Clonality

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Cyclophilin F Polyclonal 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: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





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).

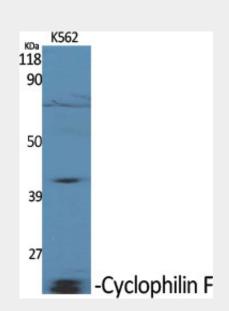
Cellular LocationMitochondrion matrix

Cyclophilin F Polyclonal Antibody - Protocols

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

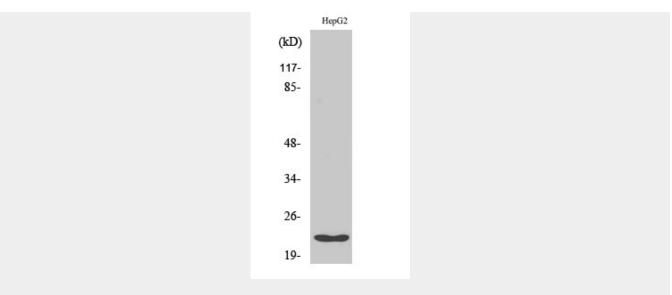
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Cyclophilin F Polyclonal Antibody - Images



Western Blot analysis of various cells using Cyclophilin F Polyclonal Antibody diluted at 1□2000





Western Blot analysis of HuvEc cells using Cyclophilin F Polyclonal Antibody diluted at 1□2000

Cyclophilin F Polyclonal Antibody - Background

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). 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.