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Anti-Cyclophilin F Antibody

Catalog # AP51443

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P30405
Reactivity	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22040

Additional Information

Gene ID	10105
Other Names	CYP3; Peptidyl-prolyl cis-trans isomerase F mitochondrial; PPIase F; Cyclophilin D; CyP-D; CypD; Cyclophilin F; Mitochondrial cyclophilin; CyP-M; Rotamase F
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cyclophilin F. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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). 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 PPIase 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

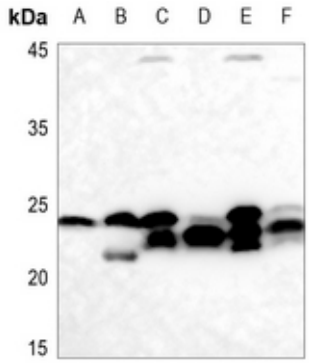
BCL2 inhibits cytochrome c-dependent apoptosis (PubMed:19228691).

Cellular Location Mitochondrion matrix

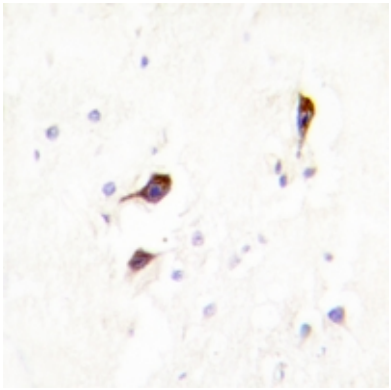
References

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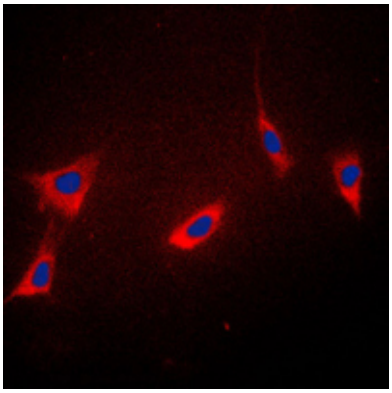
Images



Western blot analysis of Cyclophilin F expression in A549 (A), PC12 (B), mouse liver (C), mouse heart (D), rat liver (E), rat heart (F) whole cell lysates. (Predicted band size: 22 kD; Observed band size: 22 kD)



Immunohistochemical analysis of Cyclophilin F staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Cyclophilin F staining in K562 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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