

### KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1070

#### **Specification**

## KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession P30405

Primary Accession
Reactivity
P30405
Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 22 kDa , observed, 18 kDa KDa

Gene Name PF

Aliases PPIF; Peptidylprolyl Isomerase F;

Cyclophilin D; CypD; Peptidyl-Prolyl Cis-Trans Isomerase F, Mitochondrial; Mitochondrial Cyclophilin; Cyclophilin F; Rotamase F; EC 5.2.1.8; PPlase F; Cyp-D; CyP-M; CYP3; Peptidyl-Prolyl Cis-Trans Isomerase, Mitochondrial; Peptidylprolyl Isomerase F (Cyclophilin F; Cyclophilin 3;

HCyP3; CYP-D; HCYP3; CyP-D; CYPD

Immunogen A synthesized peptide derived from human

Cyclophilin F

# KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal Antibody - Additional Information

Gene ID 10105

**Other Names** 

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

## KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal 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 href="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>).

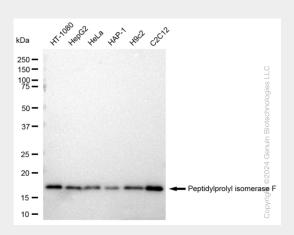
**Cellular Location**Mitochondrion matrix

#### KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal Antibody - Protocols

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

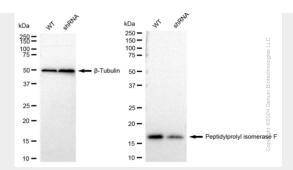
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### KD-Validated Anti-Peptidylprolyl isomerase F Rabbit Monoclonal Antibody - Images

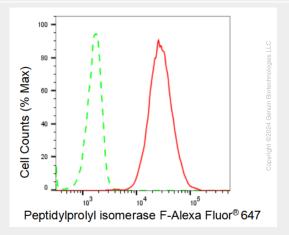


Western blotting analysis using anti-Peptidylprolyl isomerase F antibody (Cat#AGI1070). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peptidylprolyl isomerase F antibody (Cat#AGI1070, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

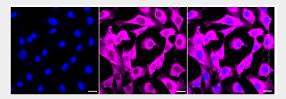




Western blotting analysis using anti-Peptidylprolyl isomerase F antibody (Cat#AGI1070). Peptidylprolyl isomerase F expression in wild type (WT) and peptidylprolyl isomerase F shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Peptidylprolyl isomerase F antibody (Cat#AGI1070, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Peptidylprolyl isomerase F expression in C2C12 cells using Peptidylprolyl isomerase F antibody (Cat#AGI1070, 1:2,000). Green, isotype control; red, Peptidylprolyl isomerase F.



Immunocytochemical staining of C2C12 cells with Peptidylprolyl isomerase F antibody (Cat#AGI1070, 1:1,000). Nuclei were stained blue with DAPI; Peptidylprolyl isomerase F was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.