

Cyclophilin F (C-12): sc-82570

BACKGROUND

Cyclophilins are conserved, ubiquitous and abundant cytosolic peptidyl-prolyl *cis-trans* isomerases that accelerate the isomerization of XaaPro peptide bonds and the refolding of proteins. Human Cyclophilin A (CyPA), an intracellular protein of 165 amino acids, is the target of Cyclosporin A (CsA) and is encoded by a single unique gene conserved between yeast to humans. Cyclophilin B (CyPB) is secreted in biological fluids such as blood or milk, and binds to a specific receptor present on human peripheral blood lymphocytes and expressed in Jurkat cells, a line of human lymphoblasts. Cyclophilin D (CyPD) is a widely expressed cytoplasmic protein that catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. Cyclophilin F (CyPF), is also known as PPIF, Cyp-D or Rotamase F, is a 207 amino acid mitochondrial matrix protein involved in the induction of necrotic and apoptotic cell death through the activation of the mitochondrial permeability transition (mPT) pore.

CHROMOSOMAL LOCATION

Genetic locus: PPIF (human) mapping to 10q22.3; Ppif (mouse) mapping to 14 A3.

SOURCE

Cyclophilin F (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Cyclophilin F of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82570 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cyclophilin F (C-12) is recommended for detection of Cyclophilin F of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Cyclophilin family members.

Cyclophilin F (C-12) is also recommended for detection of Cyclophilin F in additional species, including equine and bovine.

Suitable for use as control antibody for Cyclophilin F siRNA (h): sc-77071, Cyclophilin F siRNA (m): sc-77072, Cyclophilin F shRNA Plasmid (h): sc-77071-SH, Cyclophilin F shRNA Plasmid (m): sc-77072-SH, Cyclophilin F shRNA (h) Lentiviral Particles: sc-77071-V and Cyclophilin F shRNA (m) Lentiviral Particles: sc-77072-V.

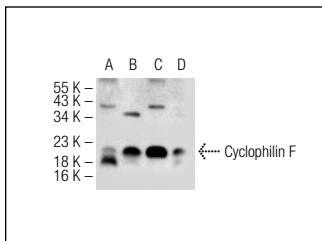
Molecular Weight of Cyclophilin F: 18 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or Cyclophilin F (h2): 293T Lysate: sc-177111.

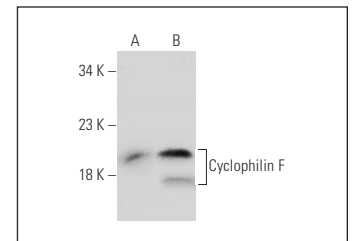
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Cyclophilin F (C-12): sc-82570. Western blot analysis of Cyclophilin F expression in HeLa (A), Hep G2 (B), PC-3 (C) and SK-BR-3 (D) whole cell lysates.



Cyclophilin F (C-12): sc-82570. Western blot analysis of Cyclophilin F expression in non-transfected: sc-117752 (A) and human Cyclophilin F transfected: sc-177111 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Amoroso, M.R., et al. 2011. TRAP1 and the proteasome regulatory particle TBP7/Rpt3 interact in the endoplasmic reticulum and control cellular ubiquitination of specific mitochondrial proteins. *Cell Death Differ.* 19: 592-604.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **Cyclophilin F (G-9): sc-376061**, our highly recommended monoclonal alternative to Cyclophilin F (C-12).