

# Cyclophilin F (E-15): sc-82571

## 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 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-82571 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Cyclophilin F (E-15) 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 (E-15) is also recommended for detection of Cyclophilin F in additional species, including equine and canine.

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.

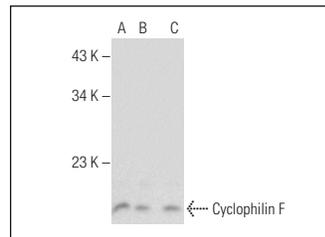
Molecular Weight of Cyclophilin F: 18 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Ramos cell lysate: sc-2216.

## 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 (E-15): sc-82571. Western blot analysis of Cyclophilin F expression in HeLa (A), K-562 (B) and Ramos (C) whole cell lysates.

## 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](http://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 (E-15).