

# Cyclophilin G (E-15): sc-167569

## 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. Cyclophilin G, also known as CARS-Cyp (Cik-associating RS-cyclophilin), SRcyp (SR-cyclophilin), CASP10, PPIase G or Rotamase G, is a ubiquitously expressed member of the Moca family of cyclophilins. Localizing to the nucleus and, during interphase, nuclear speckles, Cyclophilin G contains an N-terminal cyclophilin-type domain, an acidic serine-rich region, five Cdc2-type phosphorylation sites and a series of serine-arginine repeats throughout the C-terminus. Cyclophilin G is phosphorylated during mitosis by the Cdc2-cyclin B complex, suggesting that its function is cell cycle-regulated. In addition, Cyclophilin G is capable of interacting with Pinin and the C-terminus of the largest subunit of RNA polymerase II (Pol II). Cyclophilin G may participate in pre-mRNA splicing by regulating the subnuclear localization of SR/SR-like protein family members.

## CHROMOSOMAL LOCATION

Genetic locus: PPIG (human) mapping to 2q31.1; Ppig (mouse) mapping to 2 C2.

## SOURCE

Cyclophilin G (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Cyclophilin G 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-167569 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

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

Suitable for use as control antibody for Cyclophilin G siRNA (h): sc-94752, Cyclophilin G siRNA (m): sc-142661, Cyclophilin G shRNA Plasmid (h): sc-94752-SH, Cyclophilin G shRNA Plasmid (m): sc-142661-SH, Cyclophilin G shRNA (h) Lentiviral Particles: sc-94752-V and Cyclophilin G shRNA (m) Lentiviral Particles: sc-142661-V.

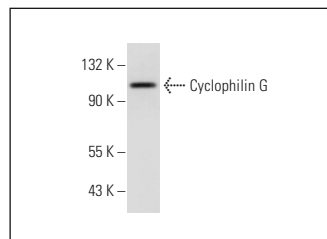
Molecular Weight of Cyclophilin G: 89 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132 or PC-12 cell lysate: sc-2250.

## 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 G (E-15): sc-167569. Western blot analysis of Cyclophilin G expression in PC-12 whole cell lysate.

## 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.


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Try **Cyclophilin G (8S5): sc-100699**, our highly recommended monoclonal alternative to Cyclophilin G (E-15).