Cyclophilin G (8S5): sc-100699

**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-associated RS-cyclophilin), SRcyp (SR-cyclophilin), CASP10, PPlase 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 sub-nuclear localization of SR/SR-like protein family members.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Cyclophilin G (B55) is a mouse monoclonal antibody raised against recombinant Cyclophilin G of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

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

**APPLICATIONS**

Cyclophilin G (B55) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


**Molecular Weight of Cyclophilin G: 89 kDa.**

Positive Controls: Cyclophilin G (h): 293T Lysate: sc-113551 or Jurkat nuclear extract: sc-2132.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

Cyclophilin G (B55): sc-100699. Western blot analysis of Cyclophilin G expression in non-transfected: sc-117752 (A) and truncated human Cyclophilin G transfected: sc-113551 (B) 293T whole cell lysates and Jurkat nuclear extract (C).

Cyclophilin G (B55): sc-100699. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon tissue showing nuclear localization.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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