

# PLRG1 (D-20): sc-74843

## BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. PLRG1 (pleiotropic regulator 1), also known as PRL1, is a 514 amino acid protein that localizes to nuclear speckles and contains seven WD repeats. Existing as a component of the multiprotein Cdc5L complex, PLRG1 plays an essential role in spliceosome assembly and subsequent pre-mRNA splicing.

## REFERENCES

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7. Rappsilber, J., et al. 2002. Large-scale proteomic analysis of the human spliceosome. *Genome Res.* 12: 1231-1245.
8. Ajuh, P. and Lamond, A.I. 2003. Identification of peptide inhibitors of pre-mRNA splicing derived from the essential interaction domains of Cdc5L and PLRG1. *Nucleic Acids Res.* 31: 6104-6116.
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## CHROMOSOMAL LOCATION

Genetic locus: PLRG1 (human) mapping to 4q32.1; Plrg1 (mouse) mapping to 3 E3.

## SOURCE

PLRG1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PLRG1 of human origin.

## STORAGE

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

## 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-74843 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PLRG1 (D-20) is recommended for detection of PLRG1 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).

Suitable for use as control antibody for PLRG1 siRNA (h): sc-76170, PLRG1 siRNA (m): sc-76171, PLRG1 shRNA Plasmid (h): sc-76170-SH, PLRG1 shRNA Plasmid (m): sc-76171-SH, PLRG1 shRNA (h) Lentiviral Particles: sc-76170-V and PLRG1 shRNA (m) Lentiviral Particles: sc-76171-V.

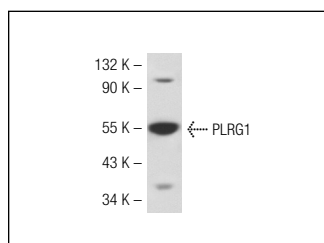
Molecular Weight of PLRG1: 54 kDa.

Positive Controls: K-562 nuclear extract: sc-2130.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



PLRG1 (D-20): sc-74843. Western blot analysis of PLRG1 expression in K-562 nuclear extract.

## 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.