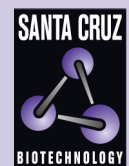


PACRG (C-8): sc-373851



The Power to Question

BACKGROUND

The deduced 257 amino acid protein PACRG (Parkin co-regulated gene) shows potential links to the ubiquitin/proteasome system. PACRG and Parkin are attached in a head-to-head arrangement on opposite DNA strands and share a common 5' flanking promoter region. The PACRG gene maps to chromosome 6q26; Northern blot analysis detects PACRG expression in all tissues examined except placenta. Using a positional cloning strategy in 197 Vietnamese leprosy simplex families (i.e. families with two unaffected parents and one affected child), significant connections between leprosy and 17 markers in the 5' regulatory region that PARK2 and PACRG share were observed. Possession of two or more of the 17 risk alleles is highly predictive of leprosy.

REFERENCES

- West, A.B., et al. 2003. Identification of a novel gene linked to Parkin via a bi-directional promoter. *J. Mol. Biol.* 326: 11-19.
- Lockhart, P.J., et al. 2004. It's a double knock-out! The quaking mouse is a spontaneous deletion of Parkin and Parkin co-regulated gene (PACRG). *Mov. Disord.* 19: 101-104.
- Mira, M.T., et al. 2004. Susceptibility to leprosy is associated with PARK2 and PACRG. *Nature* 427: 636-640.
- Alcais, A., et al. 2005. Genetic dissection of immunity in leprosy. *Curr. Opin. Immunol.* 17: 44-48.
- Dapper, J.D. and Justice, M.J. 2005. Defining the breakpoints of the quaking (viable) mouse mutation reveals a duplication from a Parkin intron. *Mov. Disord.* 20: 1369-1374.

CHROMOSOMAL LOCATION

Genetic locus: PACRG (human) mapping to 6q26.

SOURCE

PACRG (C-8) is a mouse monoclonal antibody raised against amino acids 1-100 mapping near the N-terminus of PACRG of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PACRG (C-8) is available conjugated to agarose (sc-373851 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373851 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373851 PE), fluorescein (sc-373851 FITC), Alexa Fluor® 488 (sc-373851 AF488), Alexa Fluor® 546 (sc-373851 AF546), Alexa Fluor® 594 (sc-373851 AF594) or Alexa Fluor® 647 (sc-373851 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373851 AF680) or Alexa Fluor® 790 (sc-373851 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

PACRG (C-8) is recommended for detection of PACRG of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PACRG siRNA (h): sc-61277, PACRG shRNA Plasmid (h): sc-61277-SH and PACRG shRNA (h) Lentiviral Particles: sc-61277-V.

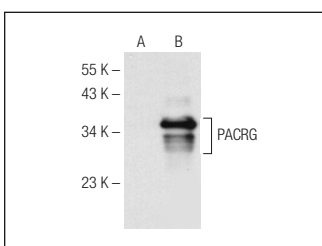
Molecular Weight of PACRG: 30 kDa.

Positive Controls: human PACRG transfected HEK293T whole cell lysate.

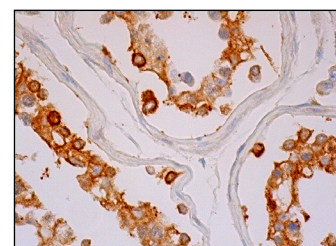
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PACRG (C-8): sc-373851. Western blot analysis of PACRG expression in non-transfected (A) and human PACRG transfected (B) HEK293T whole cell lysates.



PACRG (C-8): sc-373851. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts.

SELECT PRODUCT CITATIONS

- Khan, N., et al. 2021. Crystal structure of human PACRG in complex with MEIG1 reveals roles in axoneme formation and Tubulin binding. *Structure* 29: 572-586.e6.

STORAGE

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