

PDRG (C-9): sc-398815

BACKGROUND

PDRG (p53 and DNA damage regulated), also known as PDRG1 or C20orf126, is a 133 amino acid protein that localizes to the cytoplasm and belongs to the prefoldin subunit β family. Expressed predominately in normal testicular tissue, PDRG is functionally induced by ultraviolet light and is thought to play a role in chaperone-mediated protein folding, possibly playing a role in cellular degradation. The gene encoding PDRG maps to human chromosome 20, which houses over 600 genes some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought important for seminal production and may be potential targets for male contraception.

REFERENCES

1. Luo, X., et al. 2003. Cloning and characterization of a novel gene PDRG that is differentially regulated by p53 and ultraviolet radiation. *Oncogene* 22: 7247-7257.
2. Wong, K.K., et al. 2007. Significantly greater expression of ER, PR, and ECAD in advanced-stage low-grade ovarian serous carcinoma as revealed by immunohistochemical analysis. *Int. J. Gynecol. Pathol.* 26: 404-409.
3. Horta, M.C., et al. 2007. p53 and p21^{WAF1/CIP1} overexpression at the invasive front of lower lip squamous cell carcinoma. *J. Oral Pathol. Med.* 36: 88-92.
4. Online Mendelian Inheritance in Man, OMIMTM. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610789. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Nam, E.J. and Kim, Y.T. 2008. Alteration of cell-cycle regulation in epithelial ovarian cancer. *Int. J. Gynecol. Cancer* 18: 1169-1182.

CHROMOSOMAL LOCATION

Genetic locus: PDRG1 (human) mapping to 20q11.21; Pdrgr1 (mouse) mapping to 2 H1.

SOURCE

PDRG (C-9) is a mouse monoclonal antibody raised against amino acids 3-133 mapping at the C-terminus of PDRG of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PDRG (C-9) is available conjugated to agarose (sc-398815 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398815 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398815 PE), fluorescein (sc-398815 FITC), Alexa Fluor[®] 488 (sc-398815 AF488), Alexa Fluor[®] 546 (sc-398815 AF546), Alexa Fluor[®] 594 (sc-398815 AF594) or Alexa Fluor[®] 647 (sc-398815 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398815 AF680) or Alexa Fluor[®] 790 (sc-398815 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PDRG (C-9) is recommended for detection of PDRG of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 PDRG siRNA (h): sc-76099, PDRG siRNA (m): sc-152142, PDRG shRNA Plasmid (h): sc-76099-SH, PDRG shRNA Plasmid (m): sc-152142-SH, PDRG shRNA (h) Lentiviral Particles: sc-76099-V and PDRG shRNA (m) Lentiviral Particles: sc-152142-V.

Molecular Weight of PDRG: 15 kDa.

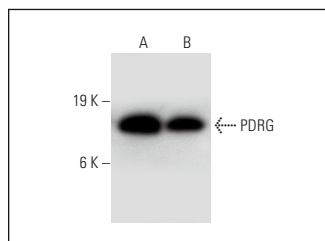
Positive Controls: Hep G2 cell lysate: sc-2227, Hs 181 Tes whole cell lysate: sc-364779 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SUPPORT REAGENTS

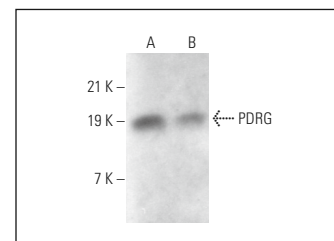
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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 κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



PDRG (C-9): sc-398815. Western blot analysis of PDRG expression in Hs 181 Tes (A) and NTERA-2 cl.D1 (B) whole cell lysates.



PDRG (C-9): sc-398815. Western blot analysis of PDRG expression in NTERA-2 cl.D1 (A) and Hep G2 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Xu, Y., et al. 2021. PDRG1 predicts a poor prognosis and facilitates the proliferation and metastasis of colorectal cancer. *Exp. Cell Res.* 409: 112924.

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.