

P2P-R (M-300): sc-25548

BACKGROUND

Rb protein and p53 are both cell cycle checkpoint components. Evidence suggests that p53 plays a role in regulating the phosphorylation of Rb by inducing p21 transcription, thus preventing Rb phosphorylation at the G₁ to S transition. Protein-protein interactions seem to be central in p53 cellular activities, as previously demonstrated with MDM2 and SV40 large T antigen. Two novel proteins have been identified by their abilities to bind to p53 and/or Rb. Human RBQ-1 (also designated RBBP6) has been cloned as a novel protein that binds to the retinoblastoma (Rb) gene product. A related mouse protein, P2P-R, also designated PACT (for p53 associated cellular protein-testis derived), has been shown to bind to both Rb and p53. Recombinant P2P-R binds to wildtype p53 but not to mutant p53, and it can interfere with p53 specific DNA binding. RBQ-1 may be a truncated human form of the P2P-R protein.

REFERENCES

1. Lane, D.P. and Crawford, L.V. 1979. T antigen is bound to a host protein in SV4-transformed cells. *Nature* 278: 261-263.
2. DeCaprio, J.A., et al. 1988. SV40 large tumor antigen forms a specific complex with the product of the retinoblastoma susceptibility gene. *Cell* 54: 275-283.

CHROMOSOMAL LOCATION

Genetic locus: RBBP6 (human) mapping to 16p12.1; Rbbp6 (mouse) mapping to 7 F3.

SOURCE

P2P-R (M-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of P2P-R of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

P2P-R (M-300) is recommended for detection of P2P-R 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).

P2P-R (M-300) is also recommended for detection of P2P-R in additional species, including canine and porcine.

Suitable for use as control antibody for P2P-R siRNA (h): sc-40900, P2P-R siRNA (m): sc-40901, P2P-R shRNA Plasmid (h): sc-40900-SH, P2P-R shRNA Plasmid (m): sc-40901-SH, P2P-R shRNA (h) Lentiviral Particles: sc-40900-V and P2P-R shRNA (m) Lentiviral Particles: sc-40901-V.

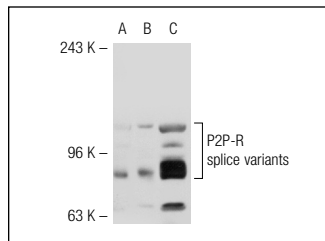
Molecular Weight of P2P-R splice variants: 202/197/106/13 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, P2P-R (m) 293T Lysate: sc-127279 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



P2P-R (M-300): sc-25548. Western blot analysis of P2P-R expression in non-transfected 293T: sc-117752 (A), mouse P2P-R transfected 293T: sc-127279 (B) and K-562 (C) whole cell lysates.

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 or our catalog for detailed protocols and support products.


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Try **P2P-R (M56): sc-9962**, our highly recommended monoclonal alternative to P2P-R (M-300).