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


CHROMOSOMAL LOCATION

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

SOURCE

P2P-R (M56) is a mouse monoclonal antibody raised against amino acids 753-909 of P2P-R of mouse origin.

PRODUCT

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. P2P-R (M56) is available conjugated to agarose (sc-9962 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-9962 HRP), 200 µg/ml, for WB; to Alexa Fluor® 488 (sc-9962 AF488), Alexa Fluor® 546 (sc-9962 AF546), Alexa Fluor® 594 (sc-9962 AF594) or Alexa Fluor® 647 (sc-9962 AF647), 200 µg/ml, for WB (RGB); to FITC, IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-9962 AF680) or Alexa Fluor® 790 (sc-9962 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

P2P-R (M56) 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500). Suitable for use as control antibody for P2P-R siRNA (h): sc-40900, P2P-R siRNA (m): sc-40901, P2P-R siRNA Plasmid (h): sc-40900-SH, P2P-R siRNA 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 or K-562 whole cell lysate: sc-2203.

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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