SANTA CRUZ BIOTECHNOLOGY, INC.

PARC (H-300): sc-67019



BACKGROUND

The p53 tumor suppressor gene is altered in over 50% of human cancers. The p53 binding proteins 53BP1 and 53BP2 (Bbp) are tumor suppressors that bind to the site-specific central DNA-binding domain of wildtype p53 in a conformation-dependent manner. Severe DNA damage can cause phosphorylation of p53 at position serine-46. This event triggers expression of p53AIP1 (apoptosis inducing protein), which contributes to subsequent events leading to programmed cell death. The protein PARC (p53-associated Parkin-like cytoplasmic protein) acts as a cytoplasmic anchor for p53 in unstressed cells, thereby regulating the localization and subsequent function of p53. The C-terminus of the PARC protein contains a RING-IBR-RING domain, which suggests it retains ubiquitin ligase activity, but PARC fails to promote degradation of p53. The gene encoding human PARC maps to chromosome 6p21.1.

REFERENCES

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- Mayo, L.D., et al. 2005. Phosphorylation of human p53 at serine 46 determines promoter selection and whether apoptosis is attenuated or amplified. J. Biol. Chem. 280: 25953-25959.

CHROMOSOMAL LOCATION

Genetic locus: CUL9 (human) mapping to 6p21.1; Cul9 (mouse) mapping to 17 C.

SOURCE

PARC (H-300) is a rabbit polyclonal antibody raised against amino acids 2161-2460 mapping near the C-terminus of PARC of human origin.

PRODUCT

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

APPLICATIONS

PARC (H-300) is recommended for detection of PARC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

PARC (H-300) is also recommended for detection of PARC in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PARC siRNA (h): sc-44715, PARC siRNA (m): sc-44716, PARC shRNA Plasmid (h): sc-44715-SH, PARC shRNA Plasmid (m): sc-44716-SH, PARC shRNA (h) Lentiviral Particles: sc-44715-V and PARC shRNA (m) Lentiviral Particles: sc-44716-V.

Molecular Weight of PARC: 270 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

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.

MONOS Satisfation Guaranteed

Try **PARC (NO-C32): sc-134412**, our highly recommended monoclonal alternative to PARC (H-300).