SANTA CRUZ BIOTECHNOLOGY, INC.

PA26-T2 (R-20): sc-9504



BACKGROUND

Cell cycle progression is subject to arrest at G_1 and G_2 checkpoints in response to DNA damage, presumably to allow time for DNA repair prior to entry into S and M phase, respectively. The p53 tumor suppressor is required for one such G_1 checkpoint and functions to upregulate expression of GADD 45 and the mitotic inhibitory protein p21. GADD 45 stimulates DNA excision repair *in vitro* and inhibits entry of cells into S phase, and it apparently acts in concert with GADD 153 in inducing growth arrest. A related DNA-damage inducible gene, GADD 34 synergizes with GADD 45 or GADD 153 in supressing cell growth. PEG-3 (progression elevated gene-3) shares significant homology with GADD 34 and is inducible by DNA damage. An additional GADD related gene, PA26, is a possible target of p53. Three isoforms of PA26 have been identified as PA26-T1, PA26-T2 and PA26-T3.

REFERENCES

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- Su, Z.Z., et al. 1997. Subtraction hybridization identifies a transformation progression associated-gene PEG-3 with sequence homology to a growth arrest and DNA damage-inducible gene. Proc. Natl. Acad. Sci. USA 94: 9125-9130.
- 8. Velasco-Miguel, S., et al. 1999. PA26, a novel target of the p53 tumor suppressor and member of the GADD family of DNA damage and growth arrest inducible genes. Oncogene 18: 127-137.

CHROMOSOMAL LOCATION

Genetic locus: SESN1 (human) mapping to 6q21; Sesn1 (mouse) mapping to 10 B2.

SOURCE

PA26-T2 (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PA26-T2 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-9504 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PA26-T2 (R-20) is recommended for detection of PA26-T2 and to a lesser extent, PA26-T1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PA26-T2 (R-20) is also recommended for detection of PA26-T2 and to a lesser extent, PA26-T1 in additional species, including canine and bovine.

Suitable for use as control antibody for PA26 siRNA (h): sc-37420, PA26 siRNA (m): sc-37421, PA26 shRNA Plasmid (h): sc-37420-SH, PA26 shRNA Plasmid (m): sc-37421-SH, PA26 shRNA (h) Lentiviral Particles: sc-37420-V and PA26 shRNA (m) Lentiviral Particles: sc-37421-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **PA26 (C-10): sc-376170**, our highly recommended monoclonal aternative to PA26-T2 (R-20).