## BACKGROUND

p53, a DNA-binding, oligomerization domain- and transcription activation domain-containing tumor suppressor, upregulates growth arrest and apoptosisrelated genes in response to stress signals, thereby influencing programmed cell death, cell differentiation and cell cycle control mechanisms. TP53TG5 (TP53-target gene 5 protein), also known as TP53-inducible gene 5 protein, is a 290 amino acid protein that interacts with p53 and may modulate p53 signaling pathways. TP53TG5 is highly expressed in brain, small intestine and heart, and is less abundant in prostate, ovary, skeletal muscle, colon and spleen. Expression of TP53TG5 is induced by p53, UV-radiation, by hydrogen peroxide treatment or by treatment with a DNA-damaging reagent.

## REFERENCES

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2. Kern, S.E., et al. 1991. Identification of p53 as a sequence-specific DNAbinding protein. Science 252: 1708-1711.
3. Ng, C.C., et al. 1999. Isolation and characterization of a novel TP53inducible gene, TP53TG3. Genes Chromosomes Cancer 26: 329-335.
4. Isaka, S., et al. 2000. Isolation and characterization of a novel TP53-inducible gene, TP53TG5, which suppresses growth and shows cell cycledependent transition of expression. Genes Chromosomes Cancer 27: 345-352.
5. Viallard, J.F., et al. 2001. Molecular mechanisms controlling the cell cycle: fundamental aspects and implications for oncology. Cancer Radiother. 5: 109-129.
6. Deloukas, P., et al. 2001. The DNA sequence and comparative analysis of human chromosome 20. Nature 414: 865-871.
7. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the mammalian gene collection (MCG). Genome Res. 14: 2121-2127.
8. Harms, K.L. and Chen, X. 2005. The C terminus of p53 family proteins is a cell fate determinant. Mol. Cell. Biol. 25: 2014-2030.

## CHROMOSOMAL LOCATION

Genetic locus: TP53TG5 (human) mapping to 20q13.12.

## SOURCE

TP53TG5 ( $\mathrm{N}-20$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N -terminus of TP53TG5 of human origin.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-85975 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

TP53TG5 (N-20) is recommended for detection of TP53TG5 of 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).
Suitable for use as control antibody for TP53TG5 siRNA (h): sc-76718, TP53TG5 shRNA Plasmid (h): sc-76718-SH and TP53TG5 shRNA (h) Lentiviral Particles: sc-76718-V.

Molecular Weight of TP53TG5: 34 kDa .

## 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 MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker ${ }^{\text {TM }}$ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

