

TP53INP1 (H-110): sc-68919

BACKGROUND

TP53INP1 (tumor protein p53-inducible nuclear protein 1), also known as p53DINP1, SIP or Teap, is a 240 amino acid protein that localizes to nuclear bodies and exists as 2 alternatively spliced isoforms, designated p53DINP1a and p53DINP1b. Expressed ubiquitously with higher expression in testis, pancreas and spleen tissue, TP53INP1 functions in response to double-stranded DNA breaks and regulates p53-mediated apoptosis, specifically by phosphorylating human p53 at Ser 46, an event that leads to cell death. Additionally, TP53INP1 is thought to interact with p73 and may be involved in the regulation of p73-controlled cell cycle progression. TP53INP1 expression is downregulated in pancreatic ductal adenocarcinomas, suggesting that, via its ability to induce cell death, TP53INP1 plays a role in tumor suppression.

REFERENCES

1. Okamura, S., et al. 2001. p53DINP1, a p53-inducible gene, regulates p53-dependent apoptosis. *Mol. Cell* 8: 85-94.
2. Nowak, J., et al. 2002. Assignment of tumor protein p53 induced nuclear protein 1 (TP53INP1) gene to human chromosome band 8q22 by *in situ* hybridization. *Cytogenet. Genome Res.* 97: 140E.
3. Tomasini, R., et al. 2002. p53-dependent expression of the stress-induced protein (SIP). *Eur. J. Cell Biol.* 81: 294-301.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606185. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Tomasini, R., et al. 2003. TP53INP1s and homeodomain-interacting protein kinase-2 (HIPK2) are partners in regulating p53 activity. *J. Biol. Chem.* 278: 37722-37729.
6. Tomasini, R., et al. 2005. TP53INP1 is a novel p73 target gene that induces cell cycle arrest and cell death by modulating p73 transcriptional activity. *Oncogene* 24: 8093-8104.

CHROMOSOMAL LOCATION

Genetic locus: TP53INP1 (human) mapping to 8q22.1; Trp53inp1 (mouse) mapping to 4 A1.

SOURCE

TP53INP1 (H-110) is a rabbit polyclonal antibody raised against amino acids 131-240 mapping at the C-terminus of TP53INP1 of human origin.

PRODUCT

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

PROTOCOLS

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

APPLICATIONS

TP53INP1 (H-110) is recommended for detection of TP53INP1 of human, mouse and, to a lesser extent, rat 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TP53INP1 (H-110) is also recommended for detection of TP53INP1 in additional species, including equine, canine, bovine and porcine.

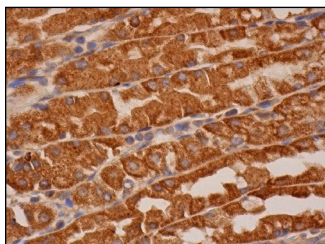
Suitable for use as control antibody for TP53INP1 siRNA (h): sc-76715, TP53INP1 siRNA (m): sc-76716, TP53INP1 shRNA Plasmid (h): sc-76715-SH, TP53INP1 shRNA Plasmid (m): sc-76716-SH, TP53INP1 shRNA (h) Lentiviral Particles: sc-76715-V and TP53INP1 shRNA (m) Lentiviral Particles: sc-76716-V.

Molecular Weight of TP53INP1: 27 kDa.

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. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TP53INP1 (H-110): sc-68919. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

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.