SANTA CRUZ BIOTECHNOLOGY, INC.

PIDD (S-17): sc-32161

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PIDD (for p53 induced protein with a death domain) encodes a protein of 915 amino acids in mice (910 amino acids in humans) and contains seven tandem leucine rich repeats (LRR) in the amino-terminus and a death domain in the carboxy-terminus. PIDD mRNA is induced by γ-irradiation in a p53-dependent manner. The basal level of PIDD mRNA is also dependent on p53. Overexpression of PIDD inhibits cell growth in a p53-like manner by inducing apoptosis. Antisense inhibition of PIDD expression attenuated p53-mediated apoptosis suggesting that PIDD expression is required for apoptosis. PIDD localizes to the cytosol.

REFERENCES

1. Lin, Y., et al. 2000. PIDD, a new death-domain-containing protein, is induced by p53 and promotes apoptosis. Nat. Genet. 26: 122-127.
2. Telliez, J.B., et al. 2000. LRDD, a novel leucine rich repeat and death domain containing protein. Biochim. Biophys. Acta 1478: 280-288.
3. Benchimol, S., et al. 2001. p53-dependent pathways of apoptosis. Cell Death Differ. 8: 1049-1051.

CHROMOSOMAL LOCATION

Genetic locus: LRDD (human) mapping to 11p15.5; Lrdd (mouse) mapping to 7 F5.

SOURCE

PIDD (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PIDD 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.

Blocking peptide available for competition studies, sc-32161 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIDD (S-17) is recommended for detection of PIDD 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PIDD (S-17) is also recommended for detection of PIDD in additional species, including bovine.

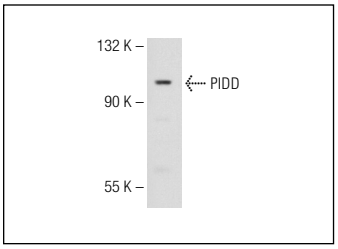
Suitable for use as control antibody for PIDD siRNA (h): sc-44656, PIDD siRNA (m): sc-44657, PIDD siRNA (r): sc-72107, PIDD shRNA Plasmid (h): sc-44656-SH, PIDD shRNA Plasmid (m): sc-44657-SH, PIDD shRNA Plasmid (r): sc-72107-SH, PIDD shRNA (h) Lentiviral Particles: sc-44656-V, PIDD shRNA (m) Lentiviral Particles: sc-44657-V and PIDD shRNA (r) Lentiviral Particles: sc-72107-V.

Molecular Weight of PIDD: 100 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 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PIDD (S-17): sc-32161. Western blot analysis of PIDD expression in 293T whole cell lysate.

SELECT PRODUCT CITATIONS

1. Niizuma, K., et al. 2008. The PIDDosome mediates delayed death of hippocampal CA1 neurons after transient global cerebral ischemia in rats. Proc. Natl. Acad. Sci. USA 105: 16368-16373.
2. Ho, L.H., et al. 2008. Caspase-2 is required for cell death induced by cytoskeletal disruption. Oncogene 27: 3393-3404.

3 Jelínek, M., et al. 2013. Caspase-2 is involved in cell death induction by taxanes in breast cancer cells. Cancer Cell Int. 13: 42.

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.