SANTA CRUZ BIOTECHNOLOGY, INC.

Wig-1 (M-20): sc-8165

BACKGROUND

p53 is a DNA-binding protein that is involved in a variety of processes, including tumor suppression and apoptosis, DNA replication and repair, and cell cycle regulation. Normal cells and tissues express a low level of p53 under most circumstances, but p53 expression is induced by DNA damage and cellular stress. Wig-1 (wild type p53-induced gene 1) is a zinc finger protein that contains a putative nuclear localization signal (NLS) and is induced by p53. Wig-1 expression is increased by whole body gamma irradiation in these tissues as well as in spleen and lung.

REFERENCES

1. Kagawa, S., Fujiwara, T., Hizuta, A., Yasuda, T., Zhang, W.W., Roth, J.A. and Tanaka, N. 1997. p53 expression overcomes p21WAF1/CIP1-mediated G_1 arrest and induces apoptosis in human cancer cells. Oncogene 15: 1903-1909.
2. Varmeh-Ziaie, S., Okan, I., Wang, Y., Magnusson, K.P., Warthoe, P., Strauss, M. and Wiman, K.G. 1997. Wig-1, a new p53-induced gene encoding a zinc finger protein. Oncogene 15: 2699-2704.
3. Trepel, M., Scheding, S., Groscurth, P., Horny, H.P., Malipiero, U., Brugger, W., Dichgans, J. and Weller, M. 1997. A new look at the role of p53 in leukemia cell sensitivity to chemotherapy. Leukemia 11: 1842-1849.
4. Evan, G. and Littlewood, T. 1998. A matter of life and cell death. Science 281: 1317-1322.
5. Kubbutat, M.H. and Vousden, K.H. 1998. Keeping an old friend under control: regulation of p53 stability. Mol. Med. Today 4: 250-256.

CHROMOSOMAL LOCATION

Genetic locus: ZMAT3 (human) mapping to 3q26.32; Zmat3 (mouse) mapping to 3 A3.

SOURCE

Wig-1 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Wig-1 of mouse 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-8165 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Wig-1 (M-20) is recommended for detection of Wig-1 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).

Wig-1 (M-20) is also recommended for detection of Wig-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Wig-1 siRNA (h): sc-106883, Wig-1 siRNA (m): sc-155349, Wig-1 shRNA Plasmid (h): sc-106883-SH, Wig-1 shRNA Plasmid (m): sc-155349-SH, Wig-1 shRNA (h) Lentiviral Particles: sc-106883-V and Wig-1 shRNA (m) Lentiviral Particles: sc-155349-V.

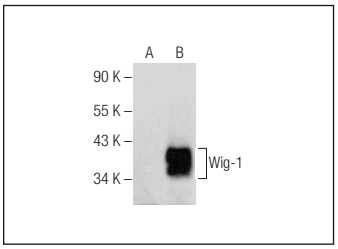
Molecular Weight of Wig-1: 32 kDa.

Positive Controls: Wig-1 (h): 293T Lysate: sc-370611.

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



Wig-1 (M-20): sc-8165. Western blot analysis of Wig-1 expression in non-transfected: sc-117752 (**A**) and human Wig-1 transfected: sc-370611 (**B**) 293T whole cell lysates.

RESEARCH USE

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