

Wig-1 (C-1): sc-398712

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. 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.
2. Kagawa, S., Fujiwara, T., Hizuta, A., Yasuda, T., Zhang, W.W., Roth, J.A. and Tanaka, N. 1997. p53 expression overcomes p21^{WAF1/CIP1}-mediated G₁ arrest and induces apoptosis in human cancer cells. *Oncogene* 15: 1903-1909.
3. Varmeh-Zaie, 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.
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 (C-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 245-272 within an internal region of Wig-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Wig-1 (C-1) is available conjugated to agarose (sc-398712 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-398712 PE), fluorescein (sc-398712 FITC), Alexa Fluor® 488 (sc-398712 AF488), Alexa Fluor® 546 (sc-398712 AF546), Alexa Fluor® 594 (sc-398712 AF594) or Alexa Fluor® 647 (sc-398712 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398712 AF680) or Alexa Fluor® 790 (sc-398712 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398712 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

Wig-1 (C-1) is recommended for detection of Wig-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

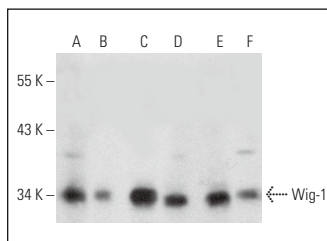
Molecular Weight of Wig-1: 32 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, EOC 20 whole cell lysate: sc-364187 or C6 whole cell lysate: sc-364373.

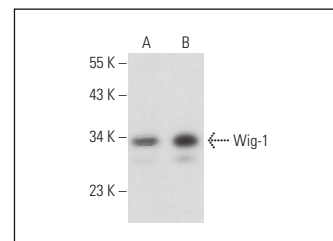
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Wig-1 (C-1): sc-398712. Western blot analysis of Wig-1 expression in Neuro-2A (A), F9 (B), AMJ2-C8 (C), NRK (D), SP2/O (E) and I-11.15 (F) whole cell lysates.



Wig-1 (C-1): sc-398712. Western blot analysis of Wig-1 expression in EOC 20 (A) and C6 (B) whole cell lysates.

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 for detailed protocols and support products.