SANTA CRUZ BIOTECHNOLOGY, INC.

ING1 (H-92): sc-67325



BACKGROUND

ING1 (inhibitor of growth protein 1) is a 422 amino acid protein encoded by the human gene ING1. ING1 belongs to the ING family and contains one PHD-type zinc finger. ING1 cooperates with p53/TP53 in the negative regulatory pathway of cell growth by modulating p53-dependent transcriptional activation. Implicated as a tumor suppressor gene, ING1 is a nuclear protein with several known isoforms, three of which are designated p47ING1 (ING1 precursor), p33ING1 and p24ING1, whose expression varies per tissue. The p33ING1 isoform is expressed in all normal tissues and cells, while the p24ING1 isoform is expressed in testis, liver, and kidney, and is weakly expressed in colon and brain, but not in breast or cultured melanocytes.

REFERENCES

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- Zeremski, M., et al. 1997. Localization of the candidate tumor suppressor gene ING1 to human chromosome 13q34. Somat. Cell Mol. Genet. 23: 233-236.
- Garkavtsev, I., et al. 1997. Cellular localization and chromosome mapping of a novel candidate tumor suppressor gene (ING1). Cytogenet. Cell Genet. 76: 176-178.
- Oren, M. 1998. Tumor suppressors. Teaming up to restrain cancer. Nature 391: 233-234.
- Garkavtsev, I., et al. 1998. The candidate tumor suppressor p33ING1 cooperates with p53 in cell growth control. Nature 391: 295-298.
- Tachibana, M., et al. 2004. Dysfunction of p53 pathway in human colorectal cancer: analysis of p53 gene mutation and the expression of the p53-associated factors p14ARF, p33ING1, p21WAF1 and MDM2. Int. J. Oncol. 25: 913-920.
- Goeman, F., et al. 2005. Growth inhibition by the tumor suppressor p33ING1 in immortalized and primary cells: involvement of two silencing domains and effect of Ras. Mol. Cell. Biol. 25: 422-431.

CHROMOSOMAL LOCATION

Genetic locus: ING1 (human) mapping to 13q34; Ing1 (mouse) mapping to 8 A1.1.

SOURCE

ING1 (H-92) is a rabbit polyclonal antibody raised against amino acids 331-442 mapping at the C-terminus of ING1 of human origin.

PRODUCT

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

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ING1 (H-92) is recommended for detection of ING1 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); may cross-react with ING2.

ING1 (H-92) is also recommended for detection of ING1 in additional species, including canine and avian.

Suitable for use as control antibody for ING1 siRNA (h): sc-36152, ING1 siRNA (m): sc-36151, ING1 shRNA Plasmid (h): sc-36152-SH, ING1 shRNA Plasmid (m): sc-36151-SH, ING1 shRNA (h) Lentiviral Particles: sc-36152-V and ING1 shRNA (m) Lentiviral Particles: sc-36151-V.

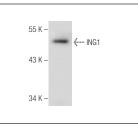
Molecular Weight of ING1 isoforms 1/2/3: 47/32/23 kDa.

Positive Controls: mouse brain extract: sc-2253, IMR-32 nuclear extract: sc-2148 or Jurkat whole cell lysate: sc-2204.

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.

DATA



ING1 (H-92): sc-67325. Western blot analysis of ING1 expression in mouse brain tissue extract.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try ING1 (E-10): sc-373817 or ING1 (E-2): sc-374295, our highly recommended monoclonal alternatives to ING1 (H-92).