

ING2 (H-71): sc-134973

BACKGROUND

ING2 (inhibitor of growth protein 2, p33ING2) is a 280 amino acid protein encoded by the human gene ING2. ING2 belongs to the ING family and contains one PHD-type zinc finger. ING2 is believed to be involved in p53/TP53 activation and p53/TP53-dependent apoptotic pathways, probably by enhancing acetylation of p53/TP53. It is a component of a MSinA-like corepressor complex, which is probably involved in deacetylation of nucleosomal histones. ING2 activity seems to be modulated by binding to phosphoinositides (PtdInsPs). ING2 is predominantly a nuclear protein that is localized to chromatin and the nuclear matrix. Upon reduced PtdIns(5)P levels, ING2 seems to be released from chromatin and, at least partially, translocated to the cytoplasm. ING2 is widely expressed with higher expression in colon-cancer tumor than in normal colon tissues. It can also be induced by the DNA-damaging agents etoposide and neocarzinostatin.

REFERENCES

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3. Kuzmichev, A., et al. 2002. Role of the Sin3-histone deacetylase complex in growth regulation by the candidate tumor suppressor p33ING1. *Mol. Cell. Biol.* 22: 835-848.
4. Nagashima, M., et al. 2003. A novel PHD-finger motif protein, p47ING3, modulates p53-mediated transcription, cell cycle control, and apoptosis. *Oncogene* 22: 343-350.
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6. Sironi, E., et al. 2004. Loss of heterozygosity on chromosome 4q32-35 in sporadic basal cell carcinomas: evidence for the involvement of p33ING2/ING1L and SAP30 genes. *J. Cutan. Pathol.* 31: 318-322.
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CHROMOSOMAL LOCATION

Genetic locus: ING2 (human) mapping to 4q35.1; Ing2 (mouse) mapping to 8 B1.1.

SOURCE

ING2 (H-71) is a rabbit polyclonal antibody raised against amino acids 111-181 mapping within an internal region of ING2 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.

APPLICATIONS

ING2 (H-71) is recommended for detection of inhibitor of growth protein 2 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).

ING2 (H-71) is also recommended for detection of inhibitor of growth protein 2 in additional species, including bovine and porcine.

Suitable for use as control antibody for ING2 siRNA (h): sc-62503, ING2 shRNA Plasmid (h): sc-62503-SH and ING2 shRNA (h) Lentiviral Particles: sc-62503-V.

Molecular Weight of ING2: 33 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.

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.



Try **ING2 (B-5): sc-271544**, our highly recommended monoclonal alternative to ING2 (H-71).