

INTS3 (C-16): sc-138355

BACKGROUND

RNA polymerase II (Pol II) is an enzyme that is composed of 12 subunits and is responsible for the transcription of protein-coding genes. Transcription initiation requires Pol II-mediated recruitment of transcription machinery to a target promoter, thereby allowing transcription to begin. The integrator complex is a multi-protein complex that associates with the C-terminal domain of Pol II and is involved in small nuclear RNA (snRNA) transcription and 3'-end processing. INTS3 (integrator complex subunit 3), also known as INT3 or SOSS-A, is a 1,043 amino acid nuclear protein and is a subunit of the Integrator complex, which associates with the C-terminal domain of RNA polymerase II large subunit and mediates 3' end processing of small nuclear RNAs U1 and U2. Expressed in the nucleus, INTS3 exists as four alternatively spliced isoforms and is encoded by a gene located on human chromosome 1q21.3.

REFERENCES

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3. Baillat, D., et al. 2005. Integrator, a multiprotein mediator of small nuclear RNA processing, associates with the C-terminal repeat of RNA polymerase II. *Cell* 123: 265-276.
4. Egloff, S., et al. 2007. Serine-7 of the RNA polymerase II CTD is specifically required for snRNA gene expression. *Science* 318: 1777-1779.
5. Inagaki, Y., et al. 2008. CREB3L4, INTS3, and SNAPAP are targets for the 1q21 amplicon frequently detected in hepatocellular carcinoma. *Cancer Genet. Cytogenet.* 180: 30-36.
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7. Li, Y., et al. 2009. HSSB1 and hSSB2 form similar multiprotein complexes that participate in DNA damage response. *J. Biol. Chem.* 284: 23525-23531.
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CHROMOSOMAL LOCATION

Genetic locus: INTS3 (human) mapping to 1q21.3; *Ints3* (mouse) mapping to 3 F1.

SOURCE

INTS3 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of INTS3 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-138355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

INTS3 (C-16) is recommended for detection of INTS3 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); non cross-reactive with other INTS family members.

INTS3 (C-16) is also recommended for detection of INTS3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for INTS3 siRNA (h): sc-88647, INTS3 siRNA (m): sc-146253, INTS3 shRNA Plasmid (h): sc-88647-SH, INTS3 shRNA Plasmid (m): sc-146253-SH, INTS3 shRNA (h) Lentiviral Particles: sc-88647-V and INTS3 shRNA (m) Lentiviral Particles: sc-146253-V.

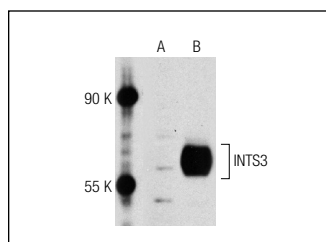
Molecular Weight of INTS3: 118 kDa.

Positive Controls: INTS3 (m): 293T Lysate: sc-121087, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

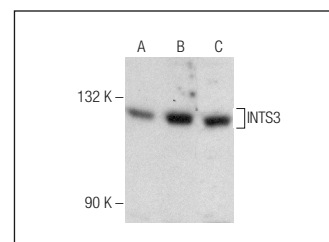
RECOMMENDED SECONDARY REAGENTS

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



INTS3 (C-16): sc-138355. Western blot analysis of INTS3 expression in non-transfected: sc-117752 (A) and mouse INTS3 transfected: sc-121087 (B) 293T whole cell lysates.



INTS3 (C-16): sc-138355. Western blot analysis of INTS3 expression in HeLa (A), Jurkat (B) and IMR-32 (C) nuclear extracts.

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.