

# INTS5 (N-18): sc-243092

## BACKGROUND

RNA polymerase II (Pol II) is an enzyme that is composed of twelve 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 RNAs (snRNA) U1 and U2 transcription, specifically in their 3'-box-dependent processing. A component of the integrator complex, INTS5 (integrator complex subunit 5), also known as KIAA1698, is a 1,019 amino acid multi-pass membrane protein localized to the nucleus. The gene encoding INTS5 maps to human chromosome 11q12.3 and mouse chromosome 19 A.

## REFERENCES

1. Uguen, P. and Murphy, S. 2003. The 3' ends of human pre-snRNAs are produced by RNA polymerase II CTD-dependent RNA processing. *EMBO J.* 22: 4544-4554.
2. Jacobs, E.Y., et al. 2004. Role of the C-terminal domain of RNA polymerase II in U2 snRNA transcription and 3' processing. *Mol. Cell. Biol.* 24: 846-855.
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. Sobennikova, M.V., et al. 2007. C-terminal domain (CTD) of the subunit Rpb1 of nuclear RNA polymerase II and its role in the transcription cycle. *Mol. Biol.* 41: 433-449.
5. Egloff, S., et al. 2007. Serine-7 of the RNA polymerase II CTD is specifically required for snRNA gene expression. *Science* 318: 1777-1779.
6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611349. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/611349>

## CHROMOSOMAL LOCATION

Genetic locus: INTS5 (human) mapping to 11q12.3; Ints5 (mouse) mapping to 19 A.

## SOURCE

INTS5 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of INTS5 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-243092 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.

## APPLICATIONS

INTS5 (N-18) is recommended for detection of INTS5 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).

INTS5 (N-18) is also recommended for detection of INTS5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for INTS5 siRNA (h): sc-96918, INTS5 siRNA (m): sc-146255, INTS5 shRNA Plasmid (h): sc-96918-SH, INTS5 shRNA Plasmid (m): sc-146255-SH, INTS5 shRNA (h) Lentiviral Particles: sc-96918-V and INTS5 shRNA (m) Lentiviral Particles: sc-146255-V.

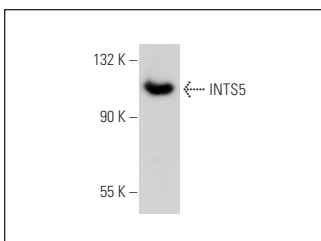
Molecular Weight of INTS5: 108 kDa.

Positive Controls: mouse cerebellum extract: sc-2403.

## 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



INTS5 (N-18): sc-243092. Western blot analysis of INTS5 expression in mouse cerebellum tissue extract.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.