SANTA CRUZ BIOTECHNOLOGY, INC.

INTS10 (E-18): sc-87168



The Power to Question

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 RNA (snRNA) transcription and 3'-end processing. INTS10 (integrator complex subunit 10) is also known as INT10 and is a 710 amino acid protein that is localized to the nucleus. INTS10 is a component of the integrator complex and, as such, is thought to aid in the regulation of 3'-end processing of spliceosomal U1 and U2 snRNAs.

REFERENCES

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- 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.
- 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: 611353. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Egloff, S., et al. 2008. Expression of human snRNA genes from beginning to end. Biochem. Soc. Trans. 36: 590-594.

CHROMOSOMAL LOCATION

Genetic locus: INTS10 (human) mapping to 8p21.3; Ints10 (mouse) mapping to 8 B3.3.

SOURCE

INTS10 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of INTS10 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-87168 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

INTS10 (E-18) is recommended for detection of INTS10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

INTS10 (E-18) is also recommended for detection of INTS10 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for INTS10 siRNA (h): sc-77859, INTS10 siRNA (m): sc-146250, INTS10 shRNA Plasmid (h): sc-77859-SH, INTS10 shRNA Plasmid (m): sc-146250-SH, INTS10 shRNA (h) Lentiviral Particles: sc-77859-V and INTS10 shRNA (m) Lentiviral Particles: sc-146250-V.

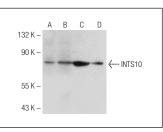
Molecular Weight of INTS10: 82 kDa.

Positive Controls: HL-60 nuclear extract: sc-2147, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

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



INTS10 (E-18): sc-87168. Western blot analysis of INTS10 expression in Jurkat $({\bf A}),$ HL-60 $({\bf B}),$ Hep G2 $({\bf C})$ and HeLa $({\bf D})$ nuclear extracts.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.