INTS12 (N-22): sc-130155

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BIOTECHNOLOGY

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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. INTS12 (integrator complex subunit 12), also known as PHF22 (PHD finger protein 22), is a 462 amino acid protein that contains one PHD-type zinc finger and is a component of the integrator complex. Localized to the nucleus, INTS12 plays a role in the processing of select snRNAs and, via its PHD domain, mediates snRNA transcriptional regulation events.

REFERENCES

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3. 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.

4. Jacobs, E.Y., Ogiwara, I. and Weiner, A.M. 2004. Role of the C-terminal domain of RNA polymerase II in U2 snRNA transcription and 3' processing. Mol. Cell. Biol. 24: 846-855.

5. Meinhart, A. and Cramer, P. 2004. Recognition of RNA polymerase II carboxy-terminal domain by 3'-RNA-processing factors. Nature 430: 223-226.

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7. Egloff, S., O'Reilly, D. and Murphy, S. 2008. Expression of human snRNA genes from beginning to end. Biochem. Soc. Trans. 36: 590-594.

CHROMOSOMAL LOCATION

Genetic locus: INTS12 (human) mapping to 4q24; Ints12 (mouse) mapping to 3 G3.

SOURCE

INTS12 (N-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of INTS12 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

INTS12 (N-22) is recommended for detection of INTS12 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for INTS12 siRNA (h): sc-89129, INTS12 siRNA (m): sc-146251, INTS12 shRNA Plasmid (h): sc-89129-SH, INTS12 shRNA Plasmid (m): sc-146251-SH, INTS12 shRNA (h) Lentiviral Particles: sc-89129-V and INTS12 shRNA (m) Lentiviral Particles: sc-146251-V.

Molecular Weight of INTS12: 49 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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).

DATA
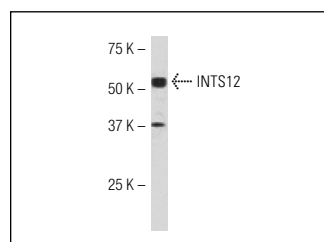
INTS12 (N-22): sc-130155. Western blot analysis of INTS12 expression in Hela whole cell lysate.

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.