



TINP1 (N-12): sc-138072

BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. TINP1 (TGF β -inducible nuclear protein 1), also known as NSA2, YR-29, CDK105, HCL-G1 or HUSSY29, is a 260 amino acid protein that localizes to the nucleolus and belongs to a subfamily of ribosomal proteins. Functioning as a component of the pre-60S ribosomal particle, TINP1 is involved in both the biogenesis of the 60S subunit and in the quality control mechanisms that regulate 60S formation, indicating an important role for TINP1 in protein translation.

REFERENCES

1. Wu, X., Ivanova, G., Merup, M., Jansson, M., Stellan, B., Grandér, D., Zabarovsky, E., Gahrton, G. and Einhorn, S. 1999. Molecular analysis of the human chromosome 5q13.3 region in patients with hairy cell leukemia and identification of tumor suppressor gene candidates. *Genomics* 60: 161-171.
2. Stanchi, F., Bertocco, E., Toppo, S., Dioguardi, R., Simionati, B., Cannata, N., Zimbello, R., Lanfranchi, G. and Valle, G. 2001. Characterization of 16 novel human genes showing high similarity to yeast sequences. *Yeast* 18: 69-80.
3. Scherl, A., Couté, Y., Déon, C., Callé, A., Kindbeiter, K., Sanchez, J.C., Greco, A., Hochstrasser, D. and Diaz, J.J. 2002. Functional proteomic analysis of human nucleolus. *Mol. Biol. Cell.* 13: 4100-4109.
4. Andersen, J.S., Lam, Y.W., Leung, A.K., Ong, S.E., Lyon, C.E., Lamond, A.I. and Mann, M. 2005. Nucleolar proteome dynamics. *Nature* 433: 77-83.
5. Lebreton, A., Saveanu, C., Decourty, L., Jacquier, A. and Fromont-Racine, M. 2006. Nsa2 is an unstable, conserved factor required for the maturation of 27 SB pre-rRNAs. *J. Biol. Chem.* 281: 27099-27108.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612497. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: NSA2 (human) mapping to 5q13.3; Nsa2 (mouse) mapping to 13 D1.

SOURCE

TINP1 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TINP1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138072 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

TINP1 (N-12) is recommended for detection of TINP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for TINP1 siRNA (h): sc-91967, TINP1 siRNA (m): sc-154277, TINP1 shRNA Plasmid (h): sc-91967-SH, TINP1 shRNA Plasmid (m): sc-154277-SH, TINP1 shRNA (h) Lentiviral Particles: sc-91967-V and TINP1 shRNA (m) Lentiviral Particles: sc-154277-V.

Molecular Weight of TINP1: 30 kDa.

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) 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.

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.