

NNP-1B (M-300): sc-134954

BACKGROUND

NNP-1B (novel nuclear protein 1B), also known as RRP1-like protein B (Rrp1b) in mouse and rat, is a 758 amino acid protein belonging to the RRP1 family. Localized to the nucleolus, NNP-1B is expressed as two isoforms produced by alternative splicing. Ubiquitously expressed, the N-terminus of NNP-1B is 80% homologous to fellow RRP1 family member NNP-1, but has a divergent C-terminus. NNP-1 has been found to play an important role in the generation of 28S rRNA in the late processing steps of ribosome biogenesis. At the end of mitosis, nucleolar proteins assemble in a sequential order during the rebuilding of the nucleolus. NNP-1 assembles after Fibrillarin and C23, and simultaneously with B23 and POP1 in the prenucleolar body pathway.

REFERENCES

1. Savino, T.M., Bastos, R., Jansen, E. and Hernandez-Verdun, D. 1999. The nucleolar antigen Nop52, the human homologue of the yeast ribosomal RNA processing RRP1, is recruited at late stages of nucleologenesis. *J. Cell Sci.* 112: 1889-1900.
2. Savino, T.M., Gebrane-Younès, J., De Mey, J., Sibarita, J.B. and Hernandez-Verdun, D. 2001. Nucleolar assembly of the rRNA processing machinery in living cells. *J. Cell Biol.* 153: 1097-1110.
3. Scherl, A., Coute, Y., Deon, C., Calle, 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. Hu, Y.H., Warnatz, H.J., Vanhecke, D., Wagner, F., Fiebitz, A., Thamm, S., Kahlem, P., Lehrach, H., Yaspo, M.L. and Janitz, M. 2006. Cell array-based intracellular localization screening reveals novel functional features of human chromosome 21 proteins. *BMC Genomics* 7: 155.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610654. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Rrp1b (mouse) mapping to 17 B1.

SOURCE

NNP-1B (M-300) is a rabbit polyclonal antibody raised against amino acids 425-724 mapping at the C-terminus of NNP-1B of mouse origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

NNP-1B (M-300) is recommended for detection of NNP-1B of mouse, rat and, to a lesser extent, 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).

Suitable for use as control antibody for NNP-1B siRNA (h): sc-91515, NNP-1B shRNA Plasmid (h): sc-91515-SH and NNP-1B shRNA (h) Lentiviral Particles: sc-91515-V.

Molecular Weight of NNP-1B: 84 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **NNP-1B (C-12): sc-398162**, our highly recommended monoclonal alternative to NNP-1B (M-300).