NNP-1 (m): 293T Lysate: sc-122085



The Power to Question

BACKGROUND

Novel nuclear protein 1 (NNP-1), also known as RRP1-like protein or nucleolar protein Nop52, is a 461 amino acid protein belonging to the RRP1 family. Localized to the nucleolus, NNP-1 has simian virus 40-type and bipartite nuclear localization signals and four coiled-coil domains within its C-terminal region. 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

- Jansen, E., Meulemans, S.M., Orlans, I.C. and Van de Ven, W.J. 1997. The NNP-1 gene (D21S2056E), which encodes a novel nuclear protein, maps in close proximity to the cystatin B gene within the EPM1 and APECED critical region on 21q22.3. Genomics 42: 336-341.
- 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.
- Savino, T.M., Gébrane-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.
- 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.
- Zharskaia, O.O. and Zatsepina, O.V. 2005. Assembly of nucleolus-derived foci in various cultured mammalian cells during mitosis. Tsitologiia 47: 780-788.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610653. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Zharskaya, O.O., Barsukova, A.S. and Zatsepina, O.V. 2008. Effect of roscovitine, a selective cyclin B-dependent kinase 1 inhibitor, on assembly of the nucleolus in mitosis. Biochemistry Mosc. 73: 411-419.
- Muro, E., Hoang, T.Q., Jobart-Malfait, A. and Hernandez-Verdun, D. 2008. In nucleoli, the steady state of nucleolar proteins is leptomycin B-sensitive. Biol. Cell 100: 303-313.

CHROMOSOMAL LOCATION

Genetic locus: Rrp1 (mouse) mapping to 10 C1.

PRODUCT

NNP-1 (m): 293T Lysate represents a lysate of mouse NNP-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

NNP-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NNP-1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

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

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