



Ribosomal Protein S16 (h2): 293T Lysate: sc-174471

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. Ribosomal Protein S16, also known as RPS16, is a 146 amino acid cytoplasmic protein that belongs to the S9P Ribosomal Protein family. One of several components of the 40S subunit, Ribosomal Protein S16 may play a role in ribosome assembly and translation initiation. Elevated levels of Ribosomal Protein S16 may be associated with pancreatic and breast cancer, suggesting a possible role for Ribosomal Protein S16 in tumorigenesis. Like other mammalian ribosomal proteins, Ribosomal Protein S16 exists as multiple processed pseudogenes that are found throughout the genome.

REFERENCES

1. Batra, S.K., et al. 1991. Molecular cloning and sequence analysis of the human Ribosomal Protein S16. *J. Biol. Chem.* 266: 6830-6833.
2. Wool, I.G., et al. 1995. Structure and evolution of mammalian Ribosomal Proteins. *Biochem. Cell Biol.* 73: 933-947.
3. Vladimirov, S.N., et al. 1996. Characterization of the human small-ribosomal-subunit proteins by N-terminal and internal sequencing, and mass spectrometry. *Eur. J. Biochem.* 239: 144-149.
4. Kenmochi, N., et al. 1998. A map of 75 human Ribosomal Protein genes. *Genome Res.* 8: 509-523.
5. Yoshihama, M., et al. 2002. The human Ribosomal Protein genes: sequencing and comparative analysis of 73 genes. *Genome Res.* 12: 379-390.
6. Kapp, L.D. and Lorsch, J.R. 2004. The molecular mechanics of eukaryotic translation. *Annu. Rev. Biochem.* 73: 657-704.
7. Andersen, J.S., et al. 2005. Nucleolar proteome dynamics. *Nature* 433: 77-83.
8. Yu, Y., et al. 2005. Mass spectrometric analysis of the human 40S ribosomal subunit: native and HCV IRES-bound complexes. *Protein Sci.* 14: 1438-1446.
9. Ian'shina, D.D., et al. 2007. Binding of human Ribosomal Protein S16 with the 18S rRNA fragment 1203-1236/1521-1698. *Mol. Biol.* 41: 1023-1030.

CHROMOSOMAL LOCATION

Genetic locus: RPS16 (human) mapping to 19q13.2.

PRODUCT

Ribosomal Protein S16 (h2): 293T Lysate represents a lysate of human Ribosomal Protein S16 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.

RESEARCH USE

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

APPLICATIONS

Ribosomal Protein S16 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Ribosomal Protein S16 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.

PROTOCOLS

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