RNH1 (m): 293T Lysate: sc-127347



The Power to Questio

BACKGROUND

RNH1, the placental ribonuclease (RNase) inhibitor, is an acidic 460-amino acid protein which contains an unusually high content of leucine and cysteine residues. It is a member of a family of proteinaceous cytoplasmic RNase inhibitors that are expressed in many tissues and bind to both intracellular and extracellular RNases in the cytosol. RNH1 binds to a diverse variety of mammalian RNases and holds them in a latent form. It is also important in the control of mRNA turnover. RNH1 inhibits angiogenesis by reversibly binding angiogenin, a member of the RNaseA superfamily. Because angiogenesis is necessary for the growth and metastasis of tumors, RNH1 may play an important role in cancer gene therapy.

REFERENCES

- Zhang, B., et al. 2002. Antitumor effect through human endostatin gene transfer in mice bearing B16 melanoma. Zhonghua Zhong Liu Za Zhi 24: 451-454.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 173320. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Chen, J.X., et al. 2005. Antitumor effects of human ribonuclease inhibitor gene transfected on B16 melanoma cells. Int. J. Biochem. Cell Biol. 37: 1219-1231.
- 4. Dickson, K.A., et al. 2005. Ribonuclease inhibitor: structure and function. Prog. Nucleic. Acid Res. Mol. Biol. 80: 349-374.
- 5. Fu, P., et al. 2005. Antitumor effect of hematopoietic cells carrying the gene of ribonuclease inhibitor. Cancer Gene Ther. 12: 268-275.
- Iyer, S., et al. 2005. Molecular recognition of human eosinophil-derived neurotoxin (RNase 2) by placental ribonuclease inhibitor. J. Mol. Biol. 347: 637-655.
- Kou, B., et al. 2005. Gene therapeutic exploration: retrovirus-mediated soluble vascular endothelial growth factor receptor-2 (sFLK-1) inhibits the tumorigenicity of S180, MCF-7, and B16 cells *in vivo*. Oncol. Res. 15: 239-247.
- 8. Rutkoski, T.J., et al. 2005. Disruption of shape-complementarity markers to create cytotoxic variants of ribonuclease A. J. Mol. Biol. 354: 41-54.
- Wang, T., et al. 2005. Inhibition of B16 melanoma growth in vivo by retroviral vector-mediated human ribonuclease inhibitor. Angiogenesis 8: 73-81.

CHROMOSOMAL LOCATION

Genetic locus: Rnh1 (mouse) mapping to 7 F5.

PRODUCT

RNH1 (m): 293T Lysate represents a lysate of mouse RNH1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

RNH1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RNH1 antibodies. Recommended use: $10-20~\mu$ l 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com