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neuroserpin (m): 293T Lysate: sc-122022

BACKGROUND

Neuroserpin is an axonally secreted glycoprotein in the central nervous system (CNS) that belongs to the family of protease inhibitors known as serpins. Neuroserpin is a serine-protease inhibitor that forms SDS-stable complexes with tissue plasminogen activator (tPA), urokinase and plasmin, but not Thrombin. Human neuroserpin is a 410 amino acid protein. Neuroserpin is expressed in the neocortex, the hippocampal formation, the olfactory bulb and the amygdala in the adult CNS, and it is expressed in the cerebellum, the granule cells and a subgroup of Purkinje cells in the developing embryo. tPA expression has been linked to "neuronal plasticity", either in the developing embryo CNS or in cases of synaptic remodeling or long-term potentiation. Overexpression of tPA may promote neuronal cell death. Mutations in the gene which codes for neuroserpin are linked to hereditary dementia. Intracerebral administration of neuroserpin after stroke decreases stroke volume and diminishes the apoptotic features of the resulting ischemic penumbra.

REFERENCES

- Osterwalder, T., Contartese, J., Stoeckli, E., Kuhn, T. and Sonderegger, P. 1996. Neuroserpin, an axonally secreted serine protease inhibitor. *EMBO J.* 15: 2944-2953.
- Krueger, S., Ghisu, G., Cinelli, P., Gschwend, T., Osterwalder, T., Wolfer, D. and Sonderegger, P. 1997. Expression of neuroserpin, an inhibitor of tissue plasminogen activator, in the developing and adult nervous system of the mouse. *J. Neurosci.* 17: 8984-8996.
- Hastings, G., Coleman, T., Haudenschild, C., Stefansson, S., Smith, E., Barthlow, R., Cherry, S., Sandkvist, M. and Lawrence, D. 1997. Neuroserpin, a brain-associated inhibitor of tissue plasminogen activator is localized primarily in neurons. *J. Biol. Chem.* 272: 33062-33067.
- Osterwalder, T., Cinelli, P., Baici, A., Pennella, A., Krueger, S., Schrimpf, S., Meins, M. and Sonderegger, P. 1998. The axonally secreted serine proteinase inhibitor, neuroserpin, inhibits plasminogen activators and plasmin but not Thrombin. *J. Biol. Chem.* 273: 2312-2321.
- Yepes, M., Sandkvist, M., Wong, M., Coleman, T., Smith, E., Cohan, S. and Lawrence, D. 2000. Neuroserpin reduces cerebral infarct volume and protects neurons from ischemia-induced apoptosis. *Blood* 96: 569-576.
- Huntington, J. and Carrell, R. 2001. The serpins: nature's molecular mouse-traps. *Sci. Prog.* 84: 125-136.
- Yazaki, M., Liepnieks, J., Murrell, J., Takao, M., Guenther, B., Piccardo, P., Farlow, M., Ghetti, B. and Benson, M. 2001. Biochemical characterization of a neuroserpin variant associated with hereditary dementia. *Am. J. Pathol.* 158: 227-233.

CHROMOSOMAL LOCATION

Genetic locus: Serpini1 (mouse) mapping to 3 E3.

PRODUCT

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

APPLICATIONS

neuroserpin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive neuroserpin 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.

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.

PROTOCOLS

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