



NTE (h2): 293T Lysate: sc-116250

BACKGROUND

Neuropathy target esterase (NTE) is a member of a newly discovered protein family with a domain conserved through evolution. It is an integral membrane protein present in all neurons and in some non-neural cell types of vertebrates. NTE is important in neural development and has the capacity to hydrolyze esters. It is important in the cell-signalling pathway controlling interactions between neurons and accessory glial cells in nervous system development. NTE can be modified by organophosphates, which can cause neuropathy (characterized by axonal degeneration) in humans. NTE loss can lead to prominent neuronal pathology in the thalamus and hippocampus and can also lead to defects in the cerebellum.

REFERENCES

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2. Tormo, N., et al. 1993. Soluble and particulate organophosphorus neuropathy target esterase in brain and sciatic nerve of the hen, cat, rat, and chick. *J. Neurochem.* 61: 2164-2168.
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4. Li, Y., et al. 2003. Protein domains, catalytic activity, and subcellular distribution of neuropathy target esterase in mammalian cells. *J. Biol. Chem.* 278: 8820-8825.
5. Akassoglou, K., et al. 2004. Brain-specific deletion of neuropathy target esterase/swisscheese results in neurodegeneration. *Proc. Natl. Acad. Sci. USA* 101: 5075-5080.
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7. Moser, M., et al. 2004. Placental failure and impaired vasculogenesis result in embryonic lethality for neuropathy target esterase-deficient mice. *Mol. Cell. Biol.* 24: 1667-1679.
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CHROMOSOMAL LOCATION

Genetic locus: PNPLA6 (human) mapping to 19p13.2.

PRODUCT

NTE (h2): 293T Lysate represents a lysate of human NTE transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

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.

PROTOCOLS

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