



Nogo-R (m): 293T Lysate: sc-122089

BACKGROUND

CNS white matter is selectively inhibitory for axonal outgrowth. Nogo is an oligodendrocyte-specific member of the reticulon family and is a component of CNS white matter that prevents axonal regeneration in the adult CNS. Nogo is expressed by oligodendrocytes and associates primarily with the endoplasmic reticulum. The extracellular domain of Nogo, designated Nogo-66 inhibits axonal extension, but does not alter non-neuronal cell morphology. Expression of a brain-specific, leucine-rich-repeat protein with high affinity for Nogo-66, the Nogo-66 receptor (Nogo-R), is sufficient to impart Nogo-66 axonal inhibition to unresponsive neurons. Disruption of the interaction between Nogo-66 and Nogo-R potentially provides for enhanced recovery after human CNS injury. Nogo-R is widely expressed in the brain, with the highest levels of expression in the gray matter of the CNS. In addition, low levels of Nogo-R mRNA are expressed in heart and kidney. The gene encoding Nogo-R maps to human chromosome 22q11.21.

REFERENCES

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8. Lee, J.K., et al. 2004. Nogo receptor antagonism promotes stroke recovery by enhancing axonal plasticity. *J. Neurosci.* 24: 6209-6217.
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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.

CHROMOSOMAL LOCATION

Genetic locus: Rtn4r (mouse) mapping to 16 A3.

PRODUCT

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

APPLICATIONS

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