SANTA CRUZ BIOTECHNOLOGY, INC.

VMAT 1 (m): 293T Lysate: sc-124573

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Neurotransmission depends on the regulated exocytotic release of chemical transmitter molecules. This requires the packaging of these substances into the specialized secretory vesicles of neurons and neuroendocrine cells, a process mediated by specific vesicular transporters. The family of genes encoding the vesicular transporters of monoamines (VMAT 1 and VMAT 2) and acetylcholine (VACht) have been cloned and functionally characterized. The sequence of these integral membrane proteins predicts twelve transmembrane domains and weak homology to a class of bacterial antibiotic resistance proteins. The vesicular transport of neurotransmitter molecules has been shown to be an active ATP- and proton dependent transport mechanism.

REFERENCES

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2. Henry, J.P., et al. 1994. Biochemistry and molecular biology of the vesicular monoamine transporter from chromaffin granules. J. Exp. Biol. 196: 251-262.
3. Haigh, J.R., et al. 1994. Acetylcholine active transport by rat brain synaptic vesicles. Neuroreport 5: 773-776.
4. Yelin, R., et al. 1995. The pharmacological profile of the vesicular monoamine transporter resembles that of multidrug transporters. FEBS Lett. 377: 201-207.
5. Varoqui, H., et al. 1996. Active transport of acetylcholine by the human vesicular acetylcholine transporter. J. Biol. Chem. 271: 27229-27232.
6. Varoqui, H., et al. 1997. Vesicular neurotransmitter transporters. Potential sites for the regulation of synaptic function. Mol. Neurobiol. 15: 165-191.
7. Reimer, R.J., et al. 1998. Vesicular neurotransmitter transport and the presynaptic regulation of quantal size. Curr. Opin. Neurobiol. 8: 405-412.

CHROMOSOMAL LOCATION

Genetic locus: Slc18a1 (mouse) mapping to 8 B3.3.

PRODUCT

VMAT 1 (m): 293T Lysate represents a lysate of mouse VMAT 1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

VMAT 1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive VMAT 1 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.