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ANT1 (m): 293T Lysate: sc-118438

BACKGROUND

Adenine nucleotide translocator 1 (ANT1) and the voltage-dependent anion-selective channel proteins 1 and 2 (VDAC1 and VDAC2) are components of the permeability transition pore complex (PTPC) of the mitochondrial inner and outer membranes, respectively. Formation of PTPCs, the subsequent dissipation of mitochondrial inner membrane potential and release of cytochrome c through the outer mitochondrial membrane are critical events in the early stages of apoptosis. Bax, a proapoptotic protein, has been shown to act upon ANT1 to induce the dissipation of mitochondrial inner membrane potential. ANT1 has a role in the maintenance of mitochondrial DNA by catalyzing the exchange of ADP and ATP across the mitochondrial inner membrane.

REFERENCES

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3. Li, K., et al. 1989. A human muscle adenine nucleotide translocator gene has four exons, is located on chromosome 4, and is differentially expressed. *J. Biol. Chem.* 264: 13998-14004.
4. Blachly-Dyson, E., et al. 1993. Cloning and functional expression in yeast of two human isoforms of the outer mitochondrial membrane channel, the voltage-dependent anion channel. *J. Biol. Chem.* 268: 1835-1841.
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8. Kaukonen, J., et al. 2000. Role of adenine nucleotide translocator 1 in mtDNA maintenance. *Science* 289: 782-785.
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CHROMOSOMAL LOCATION

Genetic locus: Slc25a4 (mouse) mapping to 8 B1.1.

PRODUCT

ANT1 (m): 293T Lysate represents a lysate of mouse ANT1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

ANT1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ANT1 antibodies. Recommended use: 10-20 μ l 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 $^{\circ}$ 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.