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SANTA CRUZ BIOTECHNOLOGY, INC.

V-ATPase G1 (m): 293T Lysate: sc-126207

BACKGROUND

Vacuolar-type H^+-ATPase (V-ATPase) is a multi-subunit enzyme responsible for acidification of eukaryotic intracellular organelles. V-ATPases pump protons against an electrochemical gradient, while F-ATPases reverse the process, thereby synthesizing ATP. A peripheral V1 domain, which is responsible for ATP hydrolysis, and a integral V0 domain, which is responsible for proton translocation, compose V-ATPase. Nine subunits (A-H) make up the V1 domain and five subunits (a, d, c, c' and c'') make up the V0 domain. Like F-ATPase, V-ATPase most likely operates through a rotary mechanism. In yeast, the V-ATPase G subunit is a soluble subunit that shares homology with the F-ATPase G subunit and may be part of a connection stalk between V1 and V0. The G2 isoform of the G subunit associates with the pore-forming a1C-subunit of L-type calcium channel and aids in proper membrane targeting of the calcium channel. The genes encoding the G1 and G2 V-ATPase subunits map to chromosomes 9q33.1 and 6p21.3, respectively.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Atp6v1g2 (mouse) mapping to 17 B2.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

V-ATPase G1 (m): 293T Lysate represents a lysate of mouse V-ATPase G1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

V-ATPase G1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive V-ATPase G1 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.

PROTOCOLS

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