SANTA CRUZ BIOTECHNOLOGY, INC.

ATP6AP1 (h4): 293T Lysate: sc-175196

BACKGROUND

Vacuolar-type H^+-ATPase (V-ATPase) is a multisubunit enzyme responsible for acidification of eukaryotic intracellular organelles. V-ATPases pump protons against an electrochemical gradient, thereby synthesizing ATP. A peripheral V_1 domain, which is responsible for ATP hydrolysis, and an integral V_0 domain, which is responsible for proton translocation, compose the V-ATPase. Nine subunits (A-H) make up the V_1 domain and five subunits (a, d, c, c' and c'') make up the V_0 domain. ATP6AP1 (ATPase, H^+ transporting, lysosomal accessory protein 1), also known as 16A, CF2, Ac45, XAP3, ATP6S1, VATPS1 (vacuolar ATP synthase S1 accessory protein) or ATP6IP1, is a type I transmembrane, V-ATPase accessory protein that is predominantly expressed in endocrine and neuronal cells. ATP6AP1 is responsible for targeting the V-ATPase enzyme to specialized complex vacuolar systems. Via its cytoplasmic tail, ATP6AP1 interacts with subunits of the V_0 domain. The disruption of this interaction in osteoclasts results in impaired bone resorption, suggesting an important role for ATP6AP1 in proper osteoclastic bone resorption.

REFERENCES

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7. Schoonderwoert, V.T. and Martens, G.J. 2002. Targeted disruption of the mouse gene encoding the V-ATPase accessory subunit Ac45. Mol. Membr. Biol. 1: 67-71.
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CHROMOSOMAL LOCATION

Genetic locus: ATP6AP1 (human) mapping to Xq28.

PRODUCT

ATP6AP1 (h4): 293T Lysate represents a lysate of human ATP6AP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

ATP6AP1 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive ATP6AP1 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.