



V-ATPase D1 (h): 293T Lysate: sc-176665

BACKGROUND

Vacuolar-type H⁺-ATPase (V-ATPase) is a multisubunit enzyme responsible for the 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 an integral V₀ domain, which is responsible for proton translocation, comprise the V-ATPase complex. Nine subunits (A-H) make up the V₁ domain and five subunits (A, D, C, C' and C'') make up the V₀ domain. V-ATPase D1 (ATPase, H⁺ transporting, lysosomal, V₀ subunit D1), also known as ATP6V0D1, P39, VATX, VMA6, ATP6D or VPATPD, is the D subunit of the V₀ domain. Expressed ubiquitously, V-ATPase D1 acts in concert with other V₀ subunits to catalytically acidify a variety of intracellular compartments, thereby synthesizing ATP to be used for vacuolar transport.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ATP6V0D1 (human) mapping to 16q22.1.

PRODUCT

V-ATPase D1 (h): 293T Lysate represents a lysate of human V-ATPase D1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

V-ATPase D1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive V-ATPase D1 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.