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# VPS4A (h2): 293T Lysate: sc-178127

## BACKGROUND

Class E vacuolar protein sorting (VPS) proteins are necessary for the appropriate sorting of receptors in the yeast endocytic pathway. Yeast Vps4p is a member of the AAA protein family (ATPases associated with diverse cellular activities) and plays an important role in transporting proteins out of prevacuolar endosomal compartments. In humans, two non-allelic orthologous proteins, VPS4A and VPS4B, are known and can form heteromeric complexes with each other. Both VPS4A and VPS4B are class E VPSs and are involved in intracellular protein trafficking, similar to Vps4p in yeast. A human CHMP1 protein, which is implicated in multivesicular body formation, physically interacts with VPS4. HIV-1 uses cellular machinery to bud from infected cells and requires VPS4 and TSG101/VPS23 for this budding process. Dominant negative mutants of VPS4 proteins inhibit vacuolar protein sorting and also arrest HIV-1 and MLV budding. Thus, retroviruses normally use the VPS pathway to form multivesicular bodies during the budding process.

## REFERENCES

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## 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.

## CHROMOSOMAL LOCATION

Genetic locus: VPS4A (human) mapping to 16q22.1.

## PRODUCT

VPS4 (h2): 293T Lysate represents a lysate of human VPS4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

VPS4 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive VPS4 antibodies. Recommended use: 10-20 µl per lane.

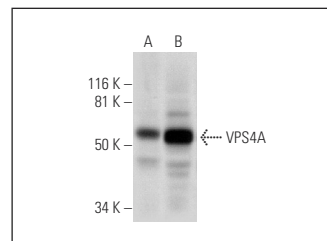
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VPS4A (A-11): sc-393428 is recommended as a positive control antibody for Western Blot analysis of enhanced human VPS4 expression in VPS4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



VPS4 (A-11): sc-393428. Western blot analysis of VPS4A expression in non-transfected: sc-117752 (A) and human VPS4A transfected: sc-178127 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.