

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.

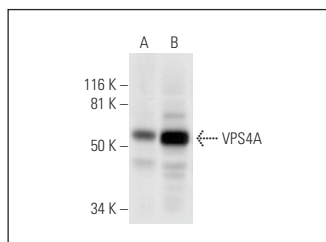
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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 for detailed protocols and support products.