

## Vps9 (yK-14): sc-31690

### BACKGROUND

In *Saccharomyces cerevisiae*, mutations in vacuolar protein sorting (VPS) genes result in secretion of proteins normally localized to the vacuole. The VPS pathway regulates protein sorting and vesicle-mediated intracellular transport. Vps9 protein is required for vacuolar protein sorting and may also be required for the consumption of transport vesicles containing vacuolar protein precursors. CUE (coupling of ubiquitin conjugation to ER degradation) domains are approximately 50 amino acid monoubiquitin binding motifs found in proteins of trafficking and ubiquitination pathways. The 2.3 Å structure of the Vps9 CUE domain is a dimeric domain-swapped variant of the ubiquitin binding UBA domain. The CUE domain of Vps9 is required for intramolecular ubiquitylation. Vps9 may bind and serve as an effector of a rab GTPase required for vacuolar protein sorting.

### REFERENCES

1. Burd, C.G., Mustol, P.A., Schu, P.V. and Emr, S.D. 1996. A yeast protein related to a mammalian Ras-binding protein, Vps9p, is required for localization of vacuolar proteins. *Mol. Cell. Biol.* 16: 2369-2377.
2. Prag, G., Misra, S., Jones, E.A., Ghirlando, R., Davies, B.A., Horazdovsky, B.F. and Hurley, J.H. 2003. Mechanism of ubiquitin recognition by the CUE domain of Vps9p. *Cell.* 113: 609-620.
3. Donaldson, K.M., Yin, H., Gekakis, N., Supek, F. and Joazeiro, C.A. 2003. Ubiquitin signals protein trafficking via interaction with a novel ubiquitin binding domain in the membrane fusion regulator, Vps9p. *Curr. Biol.* 13: 258-262.
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5. Davies, B.A., Topp, J.D., Sfeir, A.J., Katzmann, D.J., Carney, D.S., Tall, G.G., Friedberg, A.S., Deng, L., Chen, Z. and Horazdovsky, B.F. 2003. Vps9p CUE domain ubiquitin binding is required for efficient endocytic protein traffic. *J. Biol. Chem.* 278: 19826-19833.

### SOURCE

Vps9 (yK-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Vps9 of *Saccharomyces cerevisiae* origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31690 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### APPLICATIONS

Vps9 (yK-14) is recommended for detection of Vps9 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Vps9: 52 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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) or our catalog for detailed protocols and support products.