SANTA CRUZ BIOTECHNOLOGY, INC.

Cvt19 (yK-20): sc-27741

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cvt19 is required for the transport of resident vacuolar hydrolases that utilize the cytoplasm-to-vacuole targeting (Cvt) pathway. The Cvt pathway is an autophagy-related trafficking pathway whose cargo proteins, aminopeptidase I and alpha-mannosidase, are selectively transported from the cytoplasm to the lysosome-like vacuole in yeast. Aminopeptidase I (Ape1) is the major cargo protein of the Cvt pathway. Precursor Ape1 and the receptor Cvt19 is packed into a complex (Cvt complex) independent of the vesicle formation machinery. The Cvt complex is subsequently incorporated into the forming Cvt vesicle.

REFERENCES

1. Scott, S.V., et al. 2001. Cvt19 is a receptor for the cytoplasm-to-vacuole targeting pathway. Mol. Cell. 7: 1131-1141.
2. Leber, R., et al. 2001. Yol082p, a novel CVT protein involved in the selective targeting of aminopeptidase I to the yeast vacuole. J. Biol. Chem. 276: 29210-29217.
3. Subramani, S. 2001. Self-destruction in the line of duty. Dev. Cell. 1: 6-8.
4. Kim, J., et al. 2002. Convergence of multiple autophagy and cytoplasm to vacuole targeting components to a perivacuolar membrane compartment prior to de novo vesicle formation. J. Biol. Chem. 277: 763-773.
5. Shintani, T., et al. 2002. Mechanism of cargo selection in the cytoplasm to vacuole targeting pathway. Dev. Cell. 3: 825-837.
6. Reggiori, F., et al. 2003. Vps51 is part of the yeast Vps fifty-three tethering complex essential for retrograde traffic from the early endosome and Cvt vesicle completion. J. Biol. Chem. 278: 5009-5020.
7. Shintani, T., et al. 2004. Cargo proteins facilitate the formation of transport vesicles in the cytoplasm to vacuole targeting pathway. J. Biol. Chem. 279: 29889-29894.

SOURCE

Cvt19 (yK-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Cvt19 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-27741 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Cvt19 (yK-20) is recommended for detection of Cvt19 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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.

RESEARCH USE

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