SANTA CRUZ BIOTECHNOLOGY, INC.

Myo2p (yC-15): sc-28178

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The Power to Question

BACKGROUND

The yeast class V myosin, Myo2p, moves several organelles to distinct locations during the cell cycle. Myo2p is essential for mitochondrial distribution. Complex formation of Ypt11p with Myo2p accelerates the function of Myo2p for mitochondrial distribution toward the bud. The direction in which molecular motors move organelles is based in part on the polarity of microtubules and actin filaments. Vac17p binds simultaneously to Myo2p and to Vac8p, a vacuolar membrane protein. The transport complex, Myo2p-Vac17p-Vac8p, moves the vacuole to the bud, and is then disrupted through the degradation of Vac17p.

REFERENCES

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3. Toi, H., et al. 2003. She4p/Dim1p interacts with the motor domain of unconventional myosins in the budding yeast, *Saccharomyces cerevisiae*. Mol. Biol. Cell. 14: 2237-2249.
4. Ishikawa, K., et al. 2003. Identification of an organelle-specific myosin V receptor. J. Cell. Biol. 160: 887-897.
5. Tang, F., et al. 2003. Regulated degradation of a class V myosin receptor directs movement of the yeast vacuole. Nature. 422: 87-92.
6. Boldogh, I.R., et al. 2004. A type V myosin (Myo2p) and a Rab-like G-protein (Ypt11p) are required for retention of newly inherited mitochondria in yeast cells during cell division. Mol. Biol. Cell. 15: 3994-4002.
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8. Itoh, T., et al. 2004. Mmr1p is a mitochondrial factor for Myo2p-dependent inheritance of mitochondria in the budding yeast. Embo. J. 23: 2520-2530.
9. Pashkova, N., et al. 2005. Myosin V attachment to cargo requires the tight association of two functional subdomains. J. Cell. Biol. 168: 359-364.

SOURCE

Myo2p (yC-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Myo2p 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-28178 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Myo2p (yC-15) is recommended for detection of Myo2p of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.