SANTA CRUZ BIOTECHNOLOGY, INC.

Gap 1 (Y-40): sc-98846

BACKGROUND

Saccharomyces cerevisiae, a species of budding yeast, exists in haploid and diploid forms, both of which utilize ammonia and urea as nitrogen sources and are encoded by a genome containing approximately 5,800 functional genes. Gap 1 is a 602 amino acid permease that exists in *Saccharomyces cerevisiae* as a multi-pass membrane protein that belongs to the amino acid-polyamine-organocation (APC) superfamily. Functioning as a permease for a variety of amino acids, Gap 1 is responsible for amino acid import/uptake and may also participate in amino acid transport events that trigger the protein kinae A (PKA) pathway. The gene encoding Gap 1 maps to yeast chromosome XI.

REFERENCES

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5. Gao, M. and Kaiser, C.A. 2006. A conserved GTPase-containing complex is required for intracellular sorting of the general amino acid permease in yeast. Nat. Cell Biol. 8: 657-667.
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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.

SOURCE

Gap 1 (Y-40) is a rabbit polyclonal antibody raised against amino acids 1-40 mapping at the N-terminus of Gap 1 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.

APPLICATIONS

Gap 1 (Y-40) is recommended for detection of Gap 1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Gap 1: 66 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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