SANTA CRUZ BIOTECHNOLOGY, INC.

Slk19p (yF-17): sc-30555

BACKGROUND

Slk19p (synthetic lethal Kar3p gene) is an outer kinetichore protein that moves to the spindle midzone in anaphase. Slk19p is essential for proper chromosome segregation during meiosis I. *Saccharomyces cerevisiae* strains with a deletion of the SLK19 gene exhibit abnormally short mitotic spindles, increased numbers of astral microtubules, and require the presence of the kinesin motor Kar3p for viability. When cells are deprived of both Slk19p and Kar3p, rapid spindle breakdown and mitotic arrest occurs. Slk19p and Kar3p play overlapping roles in stabilizing spindle structure while acting from opposite ends of the microtubules.

REFERENCES

1. Zeng, X., Kahana, J.A., Silver, P.A., Morphew, M.K., McIntosh, J.R., Fitch, I.T., Carbon, J. and Saunders, W.S. 1999. Slk19p is a centromere protein that functions to stabilize mitotic spindles. J. Cell. Biol. 146: 415-425.
2. Kamieniecki, R.J., Shanks, R.M. and Dawson, D.S. 2000. Slk19p is necessary to prevent separation of sister chromatids in meiosis I. Curr. Biol. 10: 1182-1190.
3. Zeng, X. and Saunders, W.S. 2000. The *Saccharomyces cerevisiae* centromere protein Slk19p is required for two successive divisions during meiosis. Genetics 155: 577-587.
4. Gardner, R.D., Poddar, A., Yellman, C., Tavormina, P.A., Monteagudo, M.C. and Burke, D.J. 2001. The spindle checkpoint of the yeast *Saccharomyces cerevisiae* requires kinetochore function and maps to the CBF3 domain. Genetics 157: 1493-1502.
5. Melloy, P.G. and Holloway, S.L. 2004. Changes in the localization of the *Saccharomyces cerevisiae* anaphase-promoting complex upon microtubule depolymerization and spindle checkpoint activation. Genetics 167: 1079-1094.

SOURCE

Slk19p (yF-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Slk19p 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-30555 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

Slk19p (yF-17) is recommended for detection of Slk19p of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Slk19p: 95 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.