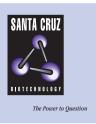
## SANTA CRUZ BIOTECHNOLOGY, INC.

# SR-α (yV-20): sc-28100



## BACKGROUND

The targetting of nascent secretory proteins to the endoplasmic reticulum membrane requires a protein designated the signal recognition particle receptor. In yeast, the  $\alpha$  subunit of the receptor, designated SR- $\alpha$ , localizes to the peripheral membrane and contains a GTP binding active site. Disruption of the gene encoding SR- $\alpha$  results in impaired translocation of soluble and membrane proteins across the ER membrane, and also a significant reduction in the growth rate of cells.

### REFERENCES

- Ogg, S.C., et al. 1992. Signal recognition particle receptor is important for cell growth and protein secretion in *Saccharomyces cerevisiae*. Mol. Biol. Cell 3: 895-911.
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- Grosshans, H., et al. 2001 Biogenesis of the signal recognition particle (SRP) involves import of SRP proteins into the nucleolus, assembly with the SRP-RNA, and Xpo1p-mediated export. J. Cell Biol.153: 745-762.
- Mutka, S.C., et al. 2001. Multifaceted physiological response allows yeast to adapt to the loss of the signal recognition particle-dependent proteintargeting pathway. Mol. Biol. Cell 12: 577-588.
- Young, B.P., et al. 2001. Sec63p and Kar2p are required for the translocation of SRP-dependent precursors into the yeast endoplasmic reticulum *in vivo*. EMBO J. 20: 262-271.
- Willer, M., et al. 2003. An *in vitro* assay using overexpressed yeast SRP demonstrates that cotranslational translocation is dependent upon the J-domain of Sec63p. Biochemistry 42: 7171-7177.
- Willer, M., et al. 2003. Identification of novel protein-protein interactions at the cytosolic surface of the Sec63 complex in the yeast ER membrane. Yeast 20:133-148.
- Van Nues, R.W., et al. 2004. Saccharomyces SRP RNA secondary structures: a conserved S-domain and extended Alu-domain. RNA 10: 75-89.

## SOURCE

SR- $\alpha$  (yV-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of signal recognition particle receptor  $\alpha$  of *Saccharomyces cerevisiae* origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28100 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### APPLICATIONS

SR- $\alpha$  (yV-20) is recommended for detection of SR- $\alpha$  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<sup>™</sup> compatible donkey antigoat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2033 and Western Blotting Luminol Reagent: sc-2048.

#### **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.