**BACKGROUND**

The translocation of proteins across the yeast ER membrane requires ATP hydrolysis and the action of DnaK (also designated Hsp70) and DnaJ homologues. At least ten members of the heat-shock protein 70 (HSP70) family are found in the budding yeast *Saccharomyces cerevisiae*. In *S. cerevisiae* the cytosolic HSP70s that promote post-translational translocation are the products of the Ssa gene family. The Ssa subfamily of HSP70 molecular chaperones in *S. cerevisiae* has four members, encoded by Ssa1, Ssa2, Ssa3, and Ssa4. Deletion of the two constitutively expressed genes, Ssa1 and Ssa2, results in cells which are slow growing and temperature sensitive. Constitutively expressed members of the yeast cytoplasmic Ssa subfamily, Ssa1 and Ssa2, display overlapping functions in the transport of aminopeptidase 1. Ssa1 is the most extensively studied cytosolic HSP70, as it plays essential functions in protein folding and translocation across the endoplasmic reticulum (ER) and mitochondrial membranes in combination with its J-domain partner Ydj1, and facilitates ER-associated degredation (ERAD). Heat-shock protein 40 (Hsp40) transiently interacts with HSP70 and facilitates HSP70 functions in these processes within cells.

**REFERENCES**


**SOURCE**

Ssa1/2 (yT-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ssa1 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-23752 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Ssa1/2 (yT-14) is recommended for detection of Ssa1 and Ssa2 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.