SANTA CRUZ BIOTECHNOLOGY, INC.

Ost1 (Y-300): sc-98936

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Membrane proteins of the endoplasmic reticulum (ER) may be localized by mechanisms that involve retention, retrieval or a combination of both. ER localization information has been found in cytoplasmic, transmembrane or luminal domains. Specific retrieval mechanisms have been identified for luminal ER proteins, which contain a KDEL domain, and for type I transmembrane proteins carrying a dilysine motif. Oligosaccharyl transferase α subunit (Ost1, also designated Dolichyl-diphosphooligosaccharide protein glycosyltransferase α subunit) is a protein belonging to the ribophorin I family of proteins. In polypeptide chains, Ost1 catalyzes the transfer of high mannose oligosaccharide to an asparagine residue within an Asn-X-Ser/Thr consensus motif.

REFERENCES

1. Silberstein, S., et al. 1992. The 48 kDa subunit of the mammalian oligosaccharyl transferase complex is homologous to the essential yeast protein WBP1. J. Biol. Chem. 267: 23658-23663.
2. Pathak, R., et al. 1995. The essential yeast NLT1 gene encodes the 64 kDa glycoprotein subunit of the oligosaccharyl transferase. FEBS Lett. 362: 229-234.
3. Silberstein, S., et al. 1995. The α subunit of the *Saccharomyces cerevisiae* oligosaccharyl transferase complex is essential for vegetative growth of yeast and is homologous to mammalian ribophorin I. J. Cell. Biol. 128: 525-536.
4. Fu, J., et al. 1997. Interactions among subunits of the oligosaccharyl transferase complex. J. Biol. Chem. 272: 29687-29692.
5. Kelleher, D.J., et al. 1997. DAD1, the defender against apoptotic cell death, is a subunit of the mammalian oligosaccharyltransferase. Proc. Natl. Acad. Sci. USA 94: 4994-4999.
6. Sanjay, A., et al. 1998. DAD1 is required for the function and the structural integrity of the oligosaccharyl transferase complex. J. Biol. Chem. 273: 26094-26099.
7. Fu, J. and Kreibich, G. 2000. Retention of subunits of the oligosaccharyltransferase complex in the endoplasmic reticulum. J. Biol. Chem. 275: 3984-3990.
8. Fu, J., et al. 2000. Localization of ribophorin II to the endoplasmic reticulum involves both its transmembrane and cytoplasmic domains. Eur. J. Cell Biol. 79: 219-228.

SOURCE

Ost1 (Y-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Ost1 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.

RESEARCH USE

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

APPLICATIONS

Ost1 (Y-300) is recommended for detection of Ost1 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 Ost1: 64 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.

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.