



Pex11 (yF-14): sc-33301

BACKGROUND

Peroxisomes perform many crucial functions in eukaryotic cells and are formed by budding from preexisting peroxisomes, although not much is known about this process on the molecular level. In *Saccharomyces cerevisiae*, baker's yeast, peroxisomal proliferation can be induced by oleate. Peroxisomal membrane protein PMP27, also designated Peroxin-11 or Pex11, belongs to the Peroxin-11 family of proteins. Pex11 plays an important role in peroxisomal proliferation. It localizes to the peroxisome where it is involved in peroxisomal fission and/or elongation. Pex11 may also play a role in allocating peroxisomes into quanta. It is a membrane associated molecule. Each cell contains approximately 1630 Pex11 molecules.

REFERENCES

1. Marshall, P.A., et al. 1995. PMP27 promotes peroxisomal proliferation. *J. Cell Biol.* 129: 345-355.
2. Casamayor, A., et al. 1995. DNA sequence analysis of a 13 kbp fragment of the left arm of yeast chromosome XV containing seven new open reading frames. *Yeast* 11: 1281-1288.
3. Erdmann, R., et al. 1995. Giant peroxisomes in oleic acid-induced *Saccharomyces cerevisiae* lacking the peroxisomal membrane protein PMP27p. *J. Cell Biol.* 128: 509-523.
4. Huh, W.K., et al. 2003. Global analysis of protein localization in budding yeast. *Nature* 425: 686-691.
5. Tam, Y.Y., et al. 2003. Pex11-related proteins in peroxisome dynamics: a role for the novel peroxin Pex27p in controlling peroxisome size and number in *Saccharomyces cerevisiae*. *Mol. Biol. Cell* 14: 4089-4102.
6. Ghaemmaghami, S., et al. 2003. Global analysis of protein expression in yeast. *Nature* 425: 737-741.
7. Thoms, S., et al. 2005. Dynamin-related proteins and Pex11 proteins in peroxisome division and proliferation. *FEBS J.* 272: 5169-5181.

SOURCE

Pex11 (yF-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Pex11 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-33301 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.

RESEARCH USE

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

APPLICATIONS

Pex11 (yF-14) is recommended for detection of Peroxin 11 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).

Molecular Weight of Pex11: 27kDa.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.