# SANTA CRUZ BIOTECHNOLOGY, INC.

# Peroxin 10 (H-300): sc-98629



BACKGROUND

Peroxisomes are single-membrane bound organelles present in virtually all eukaryotic cells. They are involved in numerous catabolic and anabolic pathways, including  $\beta$ -oxidation of very long chain fatty acids, metabolism of hydrogen peroxide, plasmalogen biosynthesis and bile acid synthesis. The Peroxin gene family, which includes more than 20 members, is required for peroxisome biogenesis. Peroxin 10 (peroxisome biogenesis factor 10), also known as RNF69 (RING finger protein 69), is a 326 amino acid protein that exhibits E3 ligase activity *in vitro*, suggesting that it is involved in UBC4-dependent ubiquination. Defects in the gene encoding Peroxin 10 are the result of a number of different disorders, such as Peroxisome biogenesis disorder complementation group 7, Zellweger syndrome and adrenoleukodystrophy neonatal. There are two isoforms of Peroxin 10 that are produced as a result of alternative splicing events.

## REFERENCES

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- Okumoto, K., Itoh, R., Shimozawa, N., Suzuki, Y., Tamura, S., Kondo, N. and Fujiki, Y. 1998. Mutations in PEX10 is the cause of Zellweger peroxisome deficiency syndrome of complementation group B. Hum. Mol. Genet. 7: 1399-1405.
- Sacksteder, K.A., Jones, J.M., South, S.T., Li, X., Liu, Y. and Gould, S.J. 2000. PEX19 binds multiple peroxisomal membrane proteins, is predominantly cytoplasmic, and is required for peroxisome membrane synthesis. J. Cell Biol. 148: 931-944.
- Fransen, M., Wylin, T., Brees, C., Mannaerts, G.P. and Van Veldhoven, P.P. 2001. Human pex19p binds peroxisomal integral membrane proteins at regions distinct from their sorting sequences. Mol. Cell. Biol. 21: 4413-4424.
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- Williams, C., van den Berg, M., Geers, E. and Distel, B. 2008. Pex10p functions as an E3 ligase for the UBC4p-dependent ubiquitination of Pex5p. Biochem. Biophys. Res. Commun. 374: 620-624.

#### CHROMOSOMAL LOCATION

Genetic locus: PEX10 (human) mapping to 1p36.32; Pex10 (mouse) mapping to 4 E2.

#### SOURCE

Peroxin 10 (H-300) is a rabbit polyclonal antibody raised against amino acids 33-326 mapping at the C-terminus of Peroxin 10 of human origin.

#### PRODUCT

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

#### APPLICATIONS

Peroxin 10 (H-300) is recommended for detection of Peroxin 10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for Peroxin 10 siRNA (h): sc-88379, Peroxin 10 siRNA (m): sc-106397, Peroxin 10 shRNA Plasmid (h): sc-88379-SH, Peroxin 10 shRNA Plasmid (m): sc-106397-SH, Peroxin 10 shRNA (h) Lentiviral Particles: sc-88379-V and Peroxin 10 shRNA (m) Lentiviral Particles: sc-106397-V.

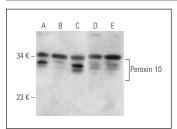
Molecular Weight of Peroxin 10: 37 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

## **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



Peroxin 10 (H-300): sc-98629. Western blot analysis of Peroxin 10 expression in MCF7 (**A**), HEK293 (**B**), Jurkat (**C**), HeLa (**D**) and LNCaP (**E**) whole cell lysates.

#### **STORAGE**

Store at 4° C, \*\*D0 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.