SANTA CRUZ BIOTECHNOLOGY, INC.

Peroxin 16 (H-97): sc-98731

BACKGROUND

Peroxisomes are single-membrane bound organelles present in virtually all eukaryotic cells. They are involved in numerous catabolic and anabolic pathways, including β-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 16, also known as Pex16 or Peroxisomal biogenesis factor 16, is a 336 amino acid multi-membrane protein that has a critical role in the biogenesis of peroxisomes. Defects in the gene encoding Peroxin 16 are the cause of multiple peroxisome-related disorders, including Zellweger syndrome (ZWS), neonatal adrenoleukodystrophy (NALD), infantile Refsum disease (IRD), classical rhizomelic chondrodysplasia punctata (RCDP) and peroxisome biogenesis disorder complementation group 9 (PBD-CG9).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PEX16 (human) mapping to 11p11.2; Pex16 (mouse) mapping to 2 E1.

RESEARCH USE

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

SOURCE

Peroxin 16 (H-97) is a rabbit polyclonal antibody raised against amino acids 240-336 mapping at the C-terminus of Peroxin 16 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Peroxin 16 (H-97) is recommended for detection of Peroxin 16 of mouse, rat and human 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).

Peroxin 16 (H-97) is also recommended for detection of Peroxin 16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Peroxin 16 siRNA (h): sc-96993, Peroxin 16 siRNA (m): sc-152173, Peroxin 16 shRNA Plasmid (h): sc-96993-SH, Peroxin 16 shRNA Plasmid (m): sc-152173-SH, Peroxin 16 shRNA (h) Lentiviral Particles: sc-96993-V and Peroxin 16 shRNA (m) Lentiviral Particles: sc-152173-V.

Molecular Weight of Peroxin 16: 42 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.