

Peroxin 10 (Y-2D3): sc-134419

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 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 ubiquitination. 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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- Sacksteder, K.A., et al. 2000. Pex19 binds multiple peroxisomal membrane proteins, is predominantly cytoplasmic, and is required for peroxisome membrane synthesis. *J. Cell Biol.* 148: 931-944.
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- Yik, W.Y., et al. 2009. Identification of novel mutations and sequence variation in the Zellweger syndrome spectrum of peroxisome biogenesis disorders. *Hum. Mutat.* 30: E467-E480.

CHROMOSOMAL LOCATION

Genetic locus: PEX10 (human) mapping to 1p36.32.

SOURCE

Peroxin 10 (Y-2D3) is a mouse monoclonal antibody raised against recombinant Peroxin 10 protein of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Peroxin 10 (Y-2D3) is recommended for detection of Peroxin 10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] 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 shRNA Plasmid (h): sc-88379-SH and Peroxin 10 shRNA (h) Lentiviral Particles: sc-88379-V.

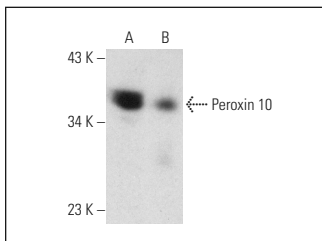
Molecular Weight of Peroxin 10: 37 kDa.

Positive Controls: human Peroxin 10 transfected 293T whole cell lysate, MCF7 whole cell lysate: sc-2206 or LNCaP cell lysate: sc-2231.

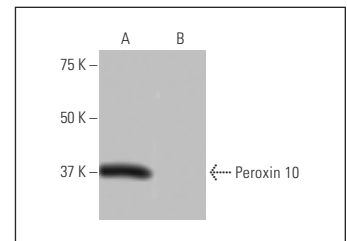
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Peroxin 10 (Y-2D3): sc-134419. Western blot analysis of Peroxin 10 expression in MCF7 (A) and LNCaP (B) whole cell lysates.



Peroxin 10 (Y-2D3): sc-134419. Western blot analysis of Peroxin 10 expression in human Peroxin 10 transfected (A) and non-transfected (B) 293T whole cell lysates.

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 for detailed protocols and support products.