

Peroxin 10 (F-22): sc-133902

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

- Warren, D.S., et al. 1998. Identification of PEX10, the gene defective in complementation group 7 of the peroxisome-biogenesis disorders. *Am. J. Hum. Genet.* 63: 347-359.
- Okumoto, K., et al. 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., 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.
- Fransen, M., et al. 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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CHROMOSOMAL LOCATION

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

SOURCE

Peroxin 10 (F-22) is an affinity purified rabbit polyclonal antibody raised against synthetic Peroxin 10 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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

Peroxin 10 (F-22) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

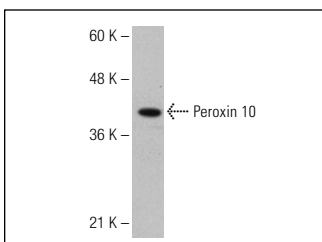
Suitable for use as control antibody for Peroxin 10 siRNA (h): sc-88379, Peroxin 10 shRNA Plasmid (h): sc-88379-SH and Peroxin 10 shRNA (h) Lentiviral Particles: sc-88379-V.

Molecular Weight of Peroxin 10: 37 kDa.

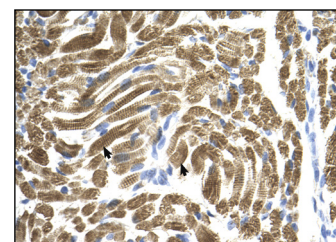
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Peroxin 10 (F-22): sc-133902. Western blot analysis of human Peroxin 10 transfected 293T whole cell lysate.



Peroxin 10 (F-22): sc-133902. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human muscle tissue showing cytoplasmic localization.

PROTOCOLS

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

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Try **Peroxin 10 (Y-2D3): sc-134419**, our highly recommended monoclonal alternative to Peroxin 10 (F-22).