

# Peroxin 1 (N-18): sc-21955

## 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 1 is required for stability of Pex5 and protein import into the peroxisome matrix. Peroxin 1 is anchored by Pex26 to peroxisome membranes, to form heteromeric AAA ATPase complexes required for the import of proteins into peroxisomes.

## REFERENCES

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- Fujiki, Y. 2000. Peroxisome biogenesis and peroxisome biogenesis disorders. *FEBS Lett.* 476: 42-46.
- Brosius, U. and Gartner, J. 2002. Cellular and molecular aspects of Zellweger syndrome and other peroxisome biogenesis disorders. *Cell. Mol. Life Sci.* 59: 1058-1069.
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- Costa-Rodrigues, J., et al. 2004. The N-terminus of the peroxisomal cycling receptor, Pex5p, is required for redirecting the peroxisome-associated peroxin back to the cytosol. *J. Biol. Chem.* 279: 46573-46579.

## CHROMOSOMAL LOCATION

Genetic locus: PEX1 (human) mapping to 7q21.2.

## SOURCE

Peroxin 1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Peroxin 1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-21955 P, (100  $\mu$ g 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.

## APPLICATIONS

Peroxin 1 (N-18) is recommended for detection of Peroxin 1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 1 (N-18) is also recommended for detection of Peroxin 1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Peroxin 1 siRNA (h): sc-44927, Peroxin 1 shRNA Plasmid (h): sc-44927-SH and Peroxin 1 shRNA (h) Lentiviral Particles: sc-44927-V.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.