

Peroxin 5R (P-16): sc-99584

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 5R, also known as PEX5-related protein or peroxisome biogenesis factor 5-like, is a 626 amino acid protein that is mainly expressed in brain, with some expression in testis and pancreas. Peroxin 5R contains five TPR repeats, which enable protein-protein interactions and assembly of large multiprotein complexes. There are three isoforms of Peroxin 5R that are produced as a result of alternative splicing events. These isoforms bind C-terminal peroxisome-targeting signals in a similar manner to Peroxin-5. Peroxin 5R interacts with Rab 8B, possibly playing a role in vesicular trafficking and neurotransmitter release.

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CHROMOSOMAL LOCATION

Genetic locus: PEX5L (human) mapping to 3q26.33; Pex5I (mouse) mapping to 3 A3.

SOURCE

Peroxin 5R (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Peroxin 5R of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-99584 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Peroxin 5R (P-16) is recommended for detection of Peroxin 5R of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Peroxin family members.

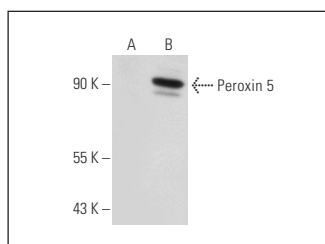
Peroxin 5R (P-16) is also recommended for detection of Peroxin 5R in additional species, including equine and canine.

Suitable for use as control antibody for Peroxin 5R siRNA (h): sc-77918, Peroxin 5R siRNA (m): sc-152175, Peroxin 5R shRNA Plasmid (h): sc-77918-SH, Peroxin 5R shRNA Plasmid (m): sc-152175-SH, Peroxin 5R shRNA (h) Lentiviral Particles: sc-77918-V and Peroxin 5R shRNA (m) Lentiviral Particles: sc-152175-V.

Molecular Weight of Peroxin 5R: 70 kDa.

Positive Controls: Peroxin 5 (h): 293 Lysate: sc-111159 or mouse liver extract: sc-2256.

DATA



Peroxin 5R (P-16): sc-99584. Western blot analysis of Peroxin 5 expression in non-transfected: sc-110760 (A) and human Peroxin 5 transfected: sc-111159 (B) 293 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.