Peroxin 19 (2E4): sc-517578



The Power to Ouestion

BACKGROUND

The covalent attachment of prenyl lipids, such as farnesyl or geranylgeranyl groups, by specific transferases is indispensable for the cellular sorting of many proteins. A farnesylated protein, Peroxin 19 (peroxisomal farnesylated protein, PxF or HK33), localizes to the outer surface of peroxisomes. Specifically, Peroxin 19 localizes to the cytoplasmic surface of peroxisomes in liver cells. Peroxin 19 is the human homolog of Pex19p, an oleic acid-inducible, farnesylated protein that is essential for peroxisome biogenesis in Saccharomyces cerevisiae. The carboxy-terminal part of Peroxin 19, including the CAAX homology box, is required for its biologic function. Moreover, Peroxin 19 is apparently involved in the initial stage of peroxisome membrane assembly, before the import of matrix protein. The gene which encodes Peroxin 19 is a housekeeping gene and maps to human chromosome 1q23.2. This is the causative gene for complementation group J peroxisome biogenesis disorder.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PEX19 (human) mapping to 1q23.2.

SOURCE

Peroxin 19 (2E4) is a mouse monoclonal antibody raised against full length recombinant Peroxin 19 of human origin.

PRODUCT

Each vial contains 100 μg lgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Peroxin 19 (2E4) is recommended for detection of Peroxin 19 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 19 siRNA (h): sc-44925, Peroxin 19 shRNA Plasmid (h): sc-44925-SH and Peroxin 19 shRNA (h) Lentiviral Particles: sc-44925-V.

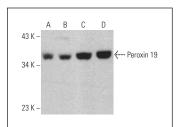
Molecular Weight of Peroxin 19: 33 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, U-698-M whole cell lysate: sc-364799 or T-47D cell lysate: sc-2293.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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 19 (2E4): sc-517578. Western blot analysis of Peroxin 19 expression in NTERA-2 cl.D1 (A), U-698-M (B), T-47D (C) and PC-3 (D) 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.

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