SANTA CRUZ BIOTECHNOLOGY, INC.

Peroxin 26 (E-20): sc-67743

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 26, also known as PEX26 (peroxisome assembly protein 26) is a widely expressed protein that functions to recruit, shuttle and anchor Peroxin 1 and Peroxin 6 to the peroxisome membrane, thus allowing the formation of heteromeric AAA ATPase complexes. Once formed, the ATPase complexes are able to import various proteins, such as catalase, into peroxisomes. Proper import of these peroxisomal proteins is essential for normal development. Defects in the gene encoding Peroxin 26 are the cause of multiple peroxisome-related disorders, including Zellweger syndrome (ZWS), infantile Refsum disease (IRD) and peroxisome biogenesis disorder complementation group 8 (PBD-CG8).

REFERENCES

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6. Halbach, A., et al. 2006. Targeting of the tail-anchored peroxisomal membrane proteins PEX26 and PEX15 occurs through C-terminal PEX19-binding sites. J. Cell Sci. 119: 2508-2517.
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9. Fujiki, Y., et al. 2008. Dynamic and functional assembly of the AAA peroxins, Pex1p and Pex6p, and their membrane receptor Pex26p involved in shuttling of the PTS1 receptor Pex5p in peroxisome biogenesis. Biochem. Soc. Trans. 36: 109-113.

RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: PEX26 (human) mapping to 22q11.21.

SOURCE

Peroxin 26 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Peroxin 26 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-67743 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Peroxin 26 (E-20) is recommended for detection of Peroxisome assembly protein 26 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

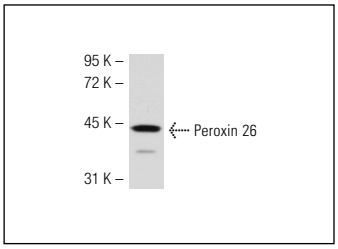
Suitable for use as control antibody for Peroxin 26 siRNA (h): sc-62773, Peroxin 26 shRNA Plasmid (h): sc-62773-SH and Peroxin 26 shRNA (h) Lentiviral Particles: sc-62773-V.

Molecular Weight (predicted) of Peroxin 26: 34 kDa.

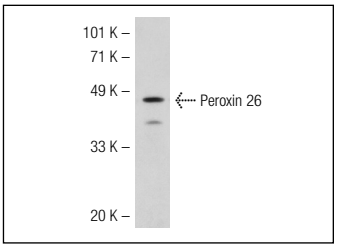
Molecular Weight (observed) of Peroxin 26: 34-43 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or HuT 78 whole cell lysate: sc-2208.

DATA



Peroxin 26 (E-20): sc-67743. Western blot analysis of Peroxin 26 expression in HuT 78 whole cell lysate.



Peroxin 26 (E-20): sc-67743. Western blot analysis of Peroxin 26 expression in HeLa whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.