Datasheet for ABIN968642

anti-PEX1 antibody (AA 1049-1256)

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Overview

Quantity:	150 µg
Target:	PEX1
Binding Specificity:	AA 1049-1256
Reactivity:	Human, Mouse, Rat, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PEX1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human PEX1 aa. 1049-1256
Clone:	1-PEX
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Chicken, Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	PEX1
Alternative Name:	PEX1 (PEX1 Products)
Background:	Peroxisomes, ubiquitous organelles of eukaryotic cells, are involved in a number of metabolic processes. Their formation involves membrane generation, targeting and insertion of peroxisomal membrane proteins (PMPs) into the membrane, and transport of matrix proteins across the newly formed membrane. Import of PMPs and synthesis of peroxisomal membranes may involve as many as 17 different PEX proteins. Mutation in any of 12 different Pex genes causes Zellweger syndrome (ZS), a disease characterized by loss of peroxisome biogenesis leading to severe neurologic, hepatic, and renal abnormalities. Mutations in two peroxisomal AAA ATPases, PEX1 and PEX6, are commonly associated with this and other neurological disorders. These ATPases form a complex in vitro and are required for normal import of proteins targeted to the peroxisome, as well as for maintaining the stability of PEX5, a peroxisomal receptor required for protein import. Substitution of aspartate for glycine at position 843 in PEX1 is the most common cause of peroxisome biogenesis disorders. Thus, PEX1 has an essential role in peroxisome biogenesis and mutation leads to Zwellweger syndrome-type diseases. This antibody is routinely tested by western blot analysis.
Molecular Weight:	143 kDa

Application Details

Comment:	Related Products: ABIN968551, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

Publications

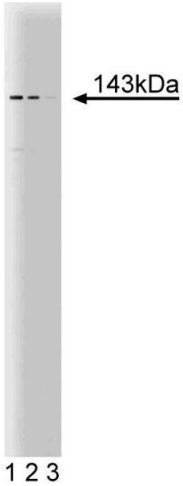
Product cited in:

Collins, Gould: "Identification of a common PEX1 mutation in Zellweger syndrome." in: **Human mutation**, Vol. 14, Issue 1, pp. 45-53, (1999) (PubMed).

Geisbrecht, Collins, Reuber, Gould: "Disruption of a PEX1-PEX6 interaction is the most common cause of the neurologic disorders Zellweger syndrome, neonatal adrenoleukodystrophy, and infantile Refsum disease." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 95, Issue 15, pp. 8630-5, (1998) (PubMed).

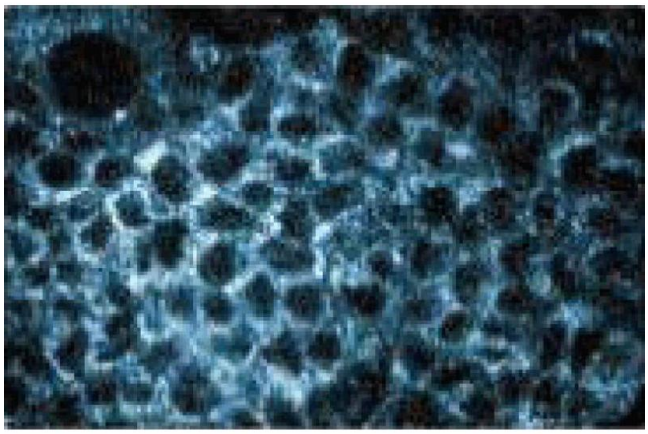
Reuber, Germain-Lee, Collins, Morrell, Ameritunga, Moser, Valle, Gould: "Mutations in PEX1 are the most common cause of peroxisome biogenesis disorders." in: **Nature genetics**, Vol. 17, Issue 4, pp. 445-8, (1997) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of PEX1 on a HCT-8 cell lysate (Human colorectal adenocarcinoma, ATCC CCL-244). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-PEX1 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of A431 cells (Human epithelial carcinoma, ATCC CRL-1555).

Western Blotting

Image 3.