10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PEX14 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51423

Product Information

Application	WB, IHC-P
Primary Accession	O75381
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41237

Additional Information

Gene ID	5195
Other Names	Peroxisomal membrane protein PEX14, PTS1 receptor-docking protein, Peroxin-14, Peroxisomal membrane anchor protein PEX14, PEX14
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PEX14. The exact sequence is proprietary.
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	PEX14 {ECO:0000303|PubMed:9653144, ECO:0000312|HGNC:HGNC:8856}
Function	Component of the PEX13-PEX14 docking complex, a translocon channel that specifically mediates the import of peroxisomal cargo proteins bound to PEX5 receptor (PubMed:24235149, PubMed:28765278, PubMed:9653144). The PEX13-PEX14 docking complex forms a large import pore which can be opened to a diameter of about 9 nm (By similarity). Mechanistically, PEX5 receptor along with cargo proteins associates with the PEX14 subunit of the PEX13-PEX14 docking complex in the cytosol, leading to the insertion of the receptor into the organelle membrane with the concomitant translocation of the cargo into the peroxisome matrix (PubMed:24235149, PubMed:28765278). Plays a key role for peroxisome movement through a direct interaction with tubulin (PubMed:21525035).
Cellular Location	Peroxisome membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:Q642G4}

Background

Component of the peroxisomal translocation machinery with PEX13 and PEX17. Interacts with both the PTS1 and PTS2 receptors. Binds directly to PEX17.

References

Fransen M.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:8087-8092(1998).
Shimizu N.,et al.J. Biol. Chem. 274:12593-12604(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Gregory S.G.,et al.Nature 441:315-321(2006).