

PEX19 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP14390a

Specification

PEX19 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

P40855

PEX19 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5824

Other Names

Peroxisomal biogenesis factor 19, 33 kDa housekeeping protein, Peroxin-19, Peroxisomal farnesylated protein, PEX19, HK33, PXF

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PEX19 Antibody (N-term) Blocking Peptide - Protein Information

Name PEX19 (HGNC:9713)

Synonyms HK33, PXF

Function

Necessary for early peroxisomal biogenesis. Acts both as a cytosolic chaperone and as an import receptor for peroxisomal membrane proteins (PMPs). Binds and stabilizes newly synthesized PMPs in the cytoplasm by interacting with their hydrophobic membrane-spanning domains, and targets them to the peroxisome membrane by binding to the integral membrane protein PEX3. Excludes CDKN2A from the nucleus and prevents its interaction with MDM2, which results in active degradation of TP53.

Cellular Location

Cytoplasm. Peroxisome membrane; Lipid-anchor; Cytoplasmic side. Note=Mainly cytoplasmic. Some fraction membrane-associated to the outer surface of peroxisomes.

Tissue Location

Ubiquitously expressed. Isoform 1 is strongly predominant in all tissues except in utero where isoform 2 is the main form.



PEX19 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

PEX19 Antibody (N-term) Blocking Peptide - Images

PEX19 Antibody (N-term) Blocking Peptide - Background

This gene is necessary for early peroxisomal biogenesis. It acts both as a cytosolic chaperone and as an import receptor forperoxisomal membrane proteins (PMPs). Peroxins (PEXs) are proteins that are essential for the assembly of functional peroxisomes. Theperoxisome biogenesis disorders (PBDs) are a group of geneticallyheterogeneous autosomal recessive, lethal diseases characterized bymultiple defects in peroxisome function. These disorders have atleast 14 complementation groups, with more than one phenotype beingobserved for some complementation groups. Although the clinical features of PBD patients vary, cells from all PBD patients exhibit a defect in the import of one or more classes of peroxisomal matrixproteins into the organelle. Defects in this gene are a cause of Zellweger syndrome (ZWS), as well as peroxisome biogenesis disorder complementation group 14 (PBD-CG14), which is also known as PBD-CGJ. Alternative splicing results in multiple transcript variants.

PEX19 Antibody (N-term) Blocking Peptide - References

Mohamed, S., et al. Am. J. Med. Genet. A 152A (9), 2318-2321 (2010) :Schmidt, F., et al. J. Biol. Chem. 285(33):25410-25417(2010)Schueller, N., et al. EMBO J. 29(15):2491-2500(2010)Liu, Y., et al. J. Psychiatr Res (2010) In press :Matsuzono, Y., et al. J. Biol. Chem. 281(1):36-42(2006)