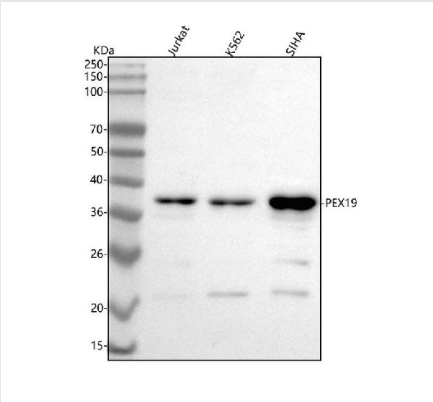
PEX19 Antibody – Rabbit Polyclonal

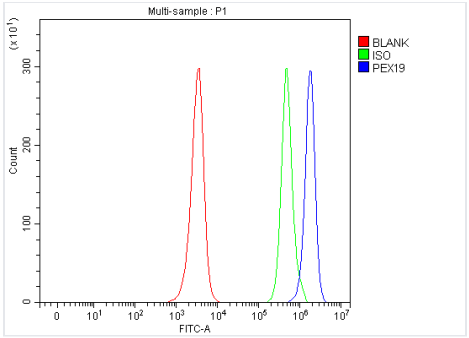
PRODUCT OVERVIEW

Product Name	PEX19, Polyclonal Antibody
Full Product Name	Anti-PEX19 Antibody Picoband
Product Gene Name	anti-PEX19 antibody
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.
Molecular Weight	32,807 Da
Chromosome Location	Chromosome: 1; NC_000001.10 (160246599..160254941, complement). Location: 1q23.2
OMIM	600279
3D Structure	ModBase 3D Structure for P40855
Immunogen	E coli-derived human PEX19 recombinant protein (Position: Q51-A269). Human PEX19 shares 91.8% and 94.5% amino acid (aa) sequence identity with mouse and rat PEX19, respectively.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Product Categories/Family for anti-PEX19 antibody	Primary Antibodies
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-PEX19 antibody	Western Blot (WB), Flow Cytometry (FC/FACS), ELISA (EIA)
Application Notes for anti-PEX19 antibody	WB: 0.25-0.5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-PEX19 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product References and Citations for anti-PEX19 antibody	1. Braun, A., Kammerer, S., Weissenhorn, W., Weiss, E. H., Cleve, H. Sequence of a putative human housekeeping gene (HK33) localized on chromosome 1. Gene 146: 291-295, 1994. 2. Gotte, K., Girzalsky, W., Linkert, M., Baumgart, E., Kammerer, S., Kunau, W.-H., Erdmann, R. Pex19p, a farnesylated protein essential for peroxisome biogenesis. Molec. Cell. Biol. 18: 616-628, 1998. 3. James, G. L., Goldstein, J. L., Pathak, R. K., Anderson, R. G. W., Brown, M. S. PxF, a prenylated protein of peroxisomes J. Biol. Chem. 269: 14182-14190, 1994.
Other Notes	Small volumes of anti-PEX19 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PEX19 purchase	MBS1758373 is an antibody targeting PEX19. Also known as Anti-PEX19 Antibody Picoband. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-PEX19 antibody

Figure 1. Western blot analysis of PEX19 using anti-PEX19 antibody (MBS1758373).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human Jurkat whole cell lysates,Lane 2: human K562 whole cell lysates,Lane 3: human SiHa whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PEX19 antigen affinity purified polyclonal antibody (#MBS1758373) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (#MBS176460) with Tanon 5200 system. A specific band was detected for PEX19 at approximately 38 kDa. The expected band size for PEX19 is at 33 kDa.



Flow Cytometry (FC/FACS) of anti-PEX19 antibody

Figure 2. Flow Cytometry analysis of JK cells using anti-PEX19 antibody (MBS1758373).Overlay histogram showing JK cells stained with MBS1758373 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PEX19 Antibody (MBS1758373, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (MBS177405, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PEX19. It may not necessarily be applicable to this product.

NCBI GI #	302370946
NCBI GeneID	5824
NCBI Accession #	NP_001180573.1
UniProt Primary Accession #	P40855
UniProt Secondary Accession #	Q5QNY4; Q8NI97; D3DVE7
UniProt Related Accession #	P40855
GenBank Nucleotide #	NM_001193644.1
NCBI Official Full Name	peroxisomal biogenesis factor 19 isoform c
NCBI Official Synonym Full Names	peroxisomal biogenesis factor 19
NCBI Official Symbol	PEX19
NCBI Official Synonym Symbols	PXF; HK33; PMP1; PMPI; PXMP1; PBD12A; D1S2223E
UniProt Protein Name	Peroxisomal biogenesis factor 19
UniProt Synonym Protein Names	33 kDa housekeeping protein; Peroxin-19; Peroxisomal farnesylated protein
Protein Family	Peroxisomal biogenesis factor
UniProt Gene Name	PEX19
UniProt Synonym Gene Names	HK33; PXF
UniProt Entry Name	PEX19_HUMAN

NCBI Protein Information	peroxisomal biogenesis factor 19; peroxin-19; housekeeping gene, 33kD; 33 kDa housekeeping protein; peroxisomal farnesylated protein
NCBI Summary for PEX19	This gene is necessary for early peroxisomal biogenesis. It acts both as a cytosolic chaperone and as an import receptor for peroxisomal membrane proteins (PMPs). Peroxins (PEXs) are proteins that are essential for the assembly of functional peroxisomes. The peroxisome biogenesis disorders (PBDs) are a group of genetically heterogeneous autosomal recessive, lethal diseases characterized by multiple defects in peroxisome function. These disorders have at least 14 complementation groups, with more than one phenotype being observed 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 matrix proteins 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. [provided by RefSeq, Aug 2010]
UniProt Comments for PEX19	PEX19: 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. Defects in PEX19 are the cause of peroxisome biogenesis disorder complementation group 14 (PBD-CG14); also known as PBD-CGJ. PBD refers to a group of peroxisomal disorders arising from a failure of protein import into the peroxisomal membrane or matrix. The PBD group is comprised of four disorders: Zellweger syndrome (ZWS), neonatal adrenoleukodystrophy (NALD), infantile Refsum disease (IRD), and classical rhizomelic chondrodysplasia punctata (RCDP). ZWS, NALD and IRD are distinct from RCDP and constitute a clinical continuum of overlapping phenotypes known as the Zellweger spectrum. The PBD group is genetically heterogeneous with at least 14 distinct genetic groups as concluded from complementation studies. Defects in PEX19 are a cause of Zellweger syndrome (ZWS). ZWS is a fatal peroxisome biogenesis disorder characterized by dysmorphic facial features, hepatomegaly, ocular abnormalities, renal cysts, hearing impairment, profound psychomotor retardation, severe hypotonia and neonatal seizures. Death occurs within the first year of life. Belongs to the peroxin-19 family. 5 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Chaperone Chromosomal Location of Human Ortholog: 1q23.2 Cellular Component: nucleoplasm; peroxisomal membrane; protein complex; intracellular membrane-bound organelle; brush border membrane; cytoplasm; integral to membrane; peroxisome; nucleus; cytosol Molecular Function: protein binding; protein N-terminus binding; ATPase binding Biological Process: peroxisome fission; protein stabilization; peroxisome organization and biogenesis; protein targeting to peroxisome; peroxisome membrane biogenesis; protein import into peroxisome membrane; transmembrane transport Disease: Peroxisome Biogenesis Disorder 12a (zellweger)
Research Articles on PEX19	**1.** PEX19 formed a complex with the peroxisomal tail anchored protein PEX26 in the cytosol and translocated it directly to peroxisomes by a TRC40-independent class I pathway.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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