

Anti-PEX2 Antibody
Rabbit polyclonal antibody to PEX2
Catalog # AP60773

Specification

Anti-PEX2 Antibody - Product Information

Application	WB
Primary Accession	P28328
Other Accession	P55098
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34843

Anti-PEX2 Antibody - Additional Information

Gene ID 5828

Other Names

PAF1; PMP3; PMP35; PXMP3; RNF72; Peroxisome biogenesis factor 2; 35 kDa peroxisomal membrane protein; Peroxin-2; Peroxisomal membrane protein 3; Peroxisome assembly factor 1; PAF-1; RING finger protein 72

Target/Specificity

Recognizes endogenous levels of PEX2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-PEX2 Antibody - Protein Information

Name PEX2 {ECO:0000303|PubMed:10891359, ECO:0000312|HGNC:HGNC:9717}

Function

E3 ubiquitin-protein ligase component of a retrotranslocation channel required for peroxisome organization by mediating export of the PEX5 receptor from peroxisomes to the cytosol, thereby promoting PEX5 recycling (PubMed: 24662292). The retrotranslocation channel is composed of PEX2, PEX10 and PEX12; each subunit contributing transmembrane segments that coassemble into an open channel that specifically allows the passage of PEX5 through the peroxisomal membrane (By similarity). PEX2 also regulates peroxisome organization by acting as a E3 ubiquitin-protein ligase (By

similarity). PEX2 ubiquitinates PEX5 during its passage through the retrotranslocation channel: catalyzes monoubiquitination of PEX5 at 'Cys-11', a modification that acts as a signal for PEX5 extraction into the cytosol (By similarity). Required for pexophagy in response to starvation by mediating ubiquitination of peroxisomal proteins, such as PEX5 and ABCD3/PMP70 (PubMed:27597759). Also involved in the response to reactive oxygen species (ROS) by mediating 'Lys-48'-linked polyubiquitination and subsequent degradation of PNPLA2/ATGL, thereby regulating lipolysis (PubMed:34903883).

Cellular Location

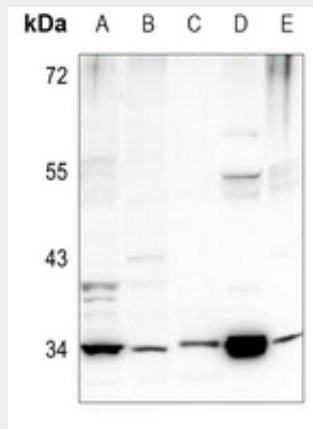
Peroxisome membrane; Multi-pass membrane protein

Anti-PEX2 Antibody - Protocols

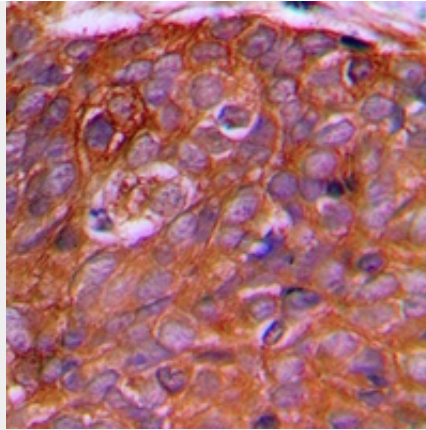
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PEX2 Antibody - Images



Western blot analysis of PEX2 expression in A549 (A), A2780 (B), 3T3L1 (C), mouse kidney (D), rat lung (E) whole cell lysates.



Immunohistochemical analysis of PEX2 staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-PEX2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PEX2. The exact sequence is proprietary.