

# Anti-PEX2 Antibody

Catalog # AP60773

## Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC                |
| Primary Accession | <a href="#">P28328</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 34843                  |

## 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 | KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PEX2. The exact sequence is proprietary.                                                                          |
| Dilution           | WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)                                                                                                                   |
| Format             | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.                                                                                                    |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                                                                                                                    |

## Protein Information

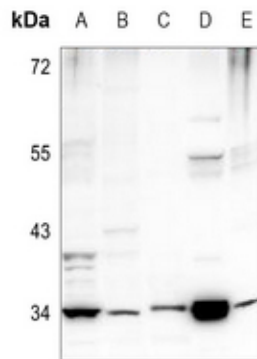
|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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: <a href="#">24662292</a> ). 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](#)).

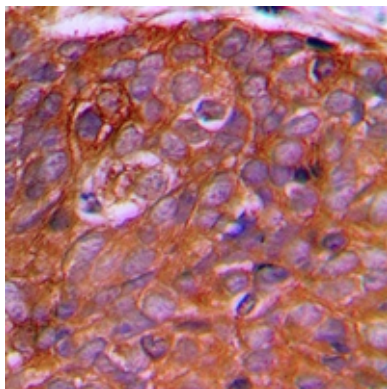
## Cellular Location

Peroxisome membrane; Multi-pass membrane protein

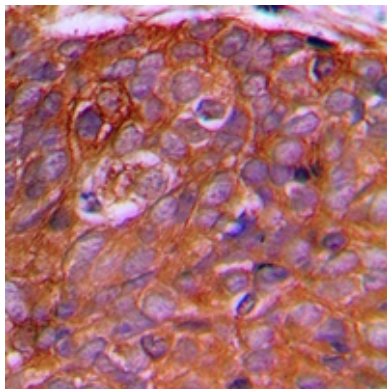
## Images



Western blot analysis of PEX2 expression in A549 (A), A2780 (B), 3T3L1 (C), mouse kidney (D), rat lung (E) whole cell lysates. (Predicted band size: 34 kDa; Observed band size: 34 kDa)



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.



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.

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