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Anti-PEX7 Antibody

Catalog # AP51424

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O00628
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35892

Additional Information

Gene ID	5191
Other Names	PTS2R; Peroxisomal targeting signal 2 receptor; PTS2 receptor; Peroxin-7
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PEX7. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
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

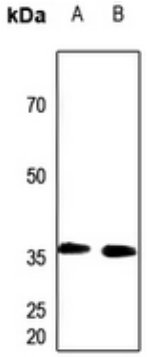
Protein Information

Name	PEX7 {ECO:0000303|PubMed:9090383, ECO:0000312|HGNC:HGNC:8860}
Function	Receptor required for the peroxisomal import of proteins containing an N-terminal PTS2-type peroxisomal targeting signal (PubMed:11931631, PubMed:22057399, PubMed:25538232, PubMed:9090381, PubMed:40739340). Specifically binds to cargo proteins containing a PTS2 peroxisomal targeting signal in the cytosol (PubMed:11931631, PubMed:22057399, PubMed:25538232). Cargo protein-binding triggers interaction with PEX5 and formation of a ternary complex composed of PEX5 and PEX7 along with PTS2-containing cargo proteins, which is translocated into peroxisomes by passing through the PEX13-PEX14 docking complex (PubMed:11546814, PubMed:25538232).
Cellular Location	Cytoplasm, cytosol. Peroxisome matrix. Note=Translocated into the peroxisome matrix together with PTS2-containing cargo proteins and PEX5
Tissue Location	Ubiquitous (PubMed:9090381). Highest expression in pancreas, skeletal muscle and heart (PubMed:9090381)

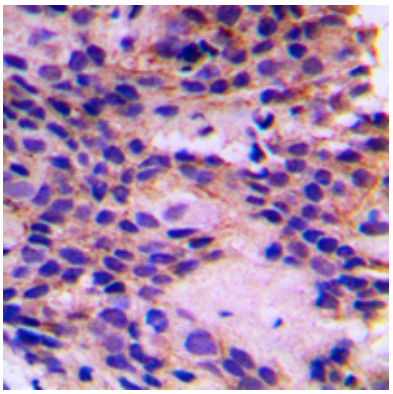
References

Purdue P.E.,et al.Nat. Genet. 15:381-384(1997).
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van den Brink D.M.,et al.Am. J. Hum. Genet. 72:471-477(2003).

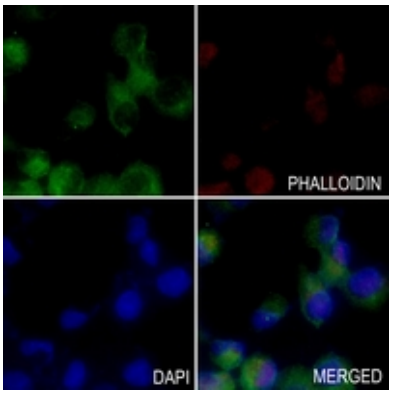
Images



Western blot analysis of PEX7 expression in mouse kidney (A), rat kidney (B) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 36 kD)



Immunohistochemical analysis of PEX7 staining in human breast 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.



Immunofluorescent analysis of PEX7 staining in A2780 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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