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Anti-ABCD4 Antibody

Catalog # AP50947

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O14678
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68597

Additional Information

Gene ID	5826
Other Names	PXMP1L; ATP-binding cassette sub-family D member 4; PMP70-related protein; P70R; Peroxisomal membrane protein 1-like; PXMP1-L; Peroxisomal membrane protein 69; PMP69
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ABCD4. The exact sequence is proprietary.
Dilution	WB~~ 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

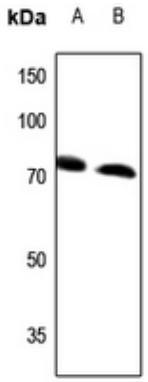
Name	ABCD4 (HGNC:68)
Synonyms	PXMP1L
Function	Lysosomal membrane protein that transports cobalamin (Vitamin B12) from the lysosomal lumen to the cytosol in an ATP-dependent manner (PubMed:22922874, PubMed:28572511, PubMed:31467407, PubMed:33845046). Targeted by LMBRD1 lysosomal chaperone from the endoplasmic reticulum to the lysosomal membrane (PubMed:27456980). Then forms a complex with lysosomal chaperone LMBRD1 and cytosolic MMACHC to transport cobalamin across the lysosomal membrane (PubMed:25535791).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Note=Targeted by LMBRD1 lysosomal chaperone to the lysosomal membrane.

Tissue Location Ubiquitous.

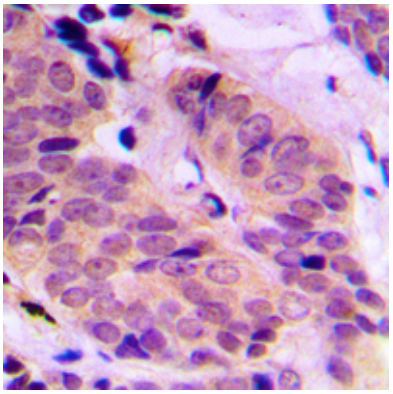
References

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Shani N.,et al.Hum. Mol. Genet. 6:1925-1931(1997).
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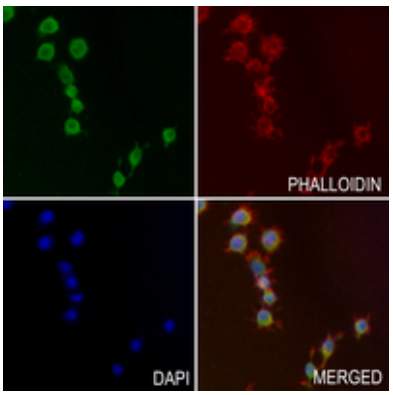
Images



Western blot analysis of ABCD4 expression in HEK293T (A), Hela (B) whole cell lysates. (Predicted band size: 68 kD; Observed band size: 69 kD)



Immunohistochemical analysis of ABCD4 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 ABCD4 staining in RAW264.7 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.