

For Research Use Only

PHLDB1 Polyclonal antibody

Catalog Number: 33225-1-AP



Basic Information

Catalog Number: 33225-1-AP	GenBank Accession Number: BC098586	Purification Method: Antigen affinity Purification
Size: 150ul , Concentration: 540 ug/ml by Nanodrop;	GeneID (NCBI): 23187	Recommended Dilutions: WB: 1:1000-1:8000 IHC: 1:50-1:500 IF/ICC: 1:200-1:800
Source: Rabbit	UNIPROT ID: Q86UU1	
Isotype: IgG	Full Name: pleckstrin homology-like domain, family B, member 1	
Immunogen Catalog Number: AG37254	Observed MW: 151 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls: WB : K-562 cells, MG-63 cells, U2OS cells IHC : human ovary tumor tissue, mouse heart tissue IF/ICC : U2OS cells,
Species Specificity: human, mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

PHLDB1 (Pleckstrin Homology-like Domain Family B Member 1), also known as LL5a, is a scaffolding protein that specifically binds to phosphatidylinositol-3,4,5-trisphosphate (PIP3) through its C-terminal PH domain, anchoring microtubule plus ends to the cell cortex. Functionally, PHLDB1 acts as an insulin-responsive protein that translocates from the cytoplasm to the plasma membrane upon insulin stimulation, promoting GLUT4 translocation and glucose uptake by enhancing Akt phosphorylation. In addition, PHLDB1 plays a key role in cell migration. Studies have shown that its genetic polymorphisms are associated with glioma risk, and by enhancing PI3K/AKT signaling, it promotes tumor cell invasion and metastasis, making it a potential prognostic marker and therapeutic target.

Storage

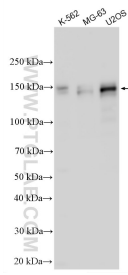
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

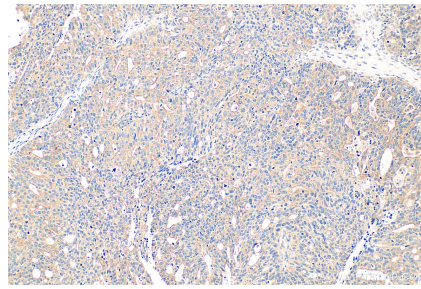
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

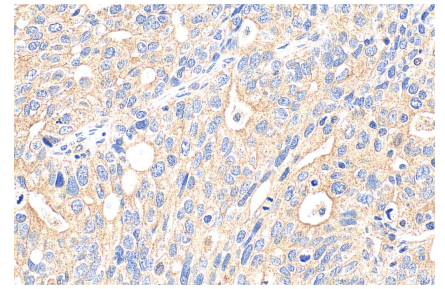
Selected Validation Data



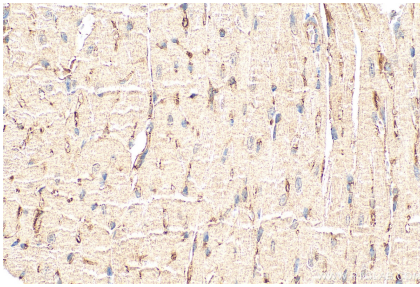
Various lysates were subjected to SDS PAGE followed by western blot with 33225-1-AP (PHLDB1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



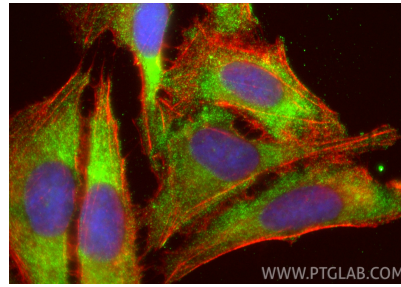
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 33225-1-AP (PHLDB1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 33225-1-AP (PHLDB1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 33225-1-AP (PHLDB1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using PHLDB1 antibody (33225-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).