

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 |
| Source: Rabbit | GeneID (NCBI): 23187 | Recommended Dilutions: WB: 1:1000-1:8000 IHC: 1:50-1:500 IF/ICC: 1:200-1:800 |
| Isotype: IgG | UNIPROT ID: Q86UU1 | |
| Immunogen Catalog Number: AG37254 | Full Name: pleckstrin homology-like domain, family B, member 1 | |
| | Observed MW: 151 kDa | |

Applications

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| 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 LL5 α , 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

For technical support and original validation data for this product please contact:

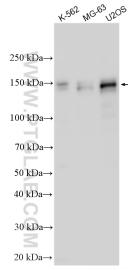
T: 4006900926

E: Proteintech-CN@ptglab.com

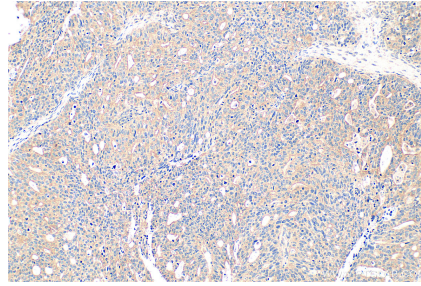
W: ptgcn.com

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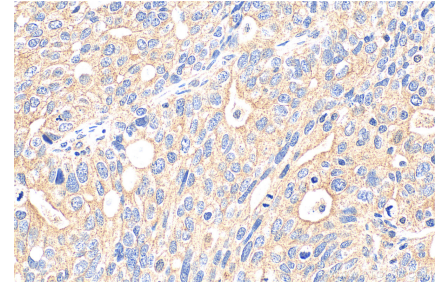
Selected Validation Data



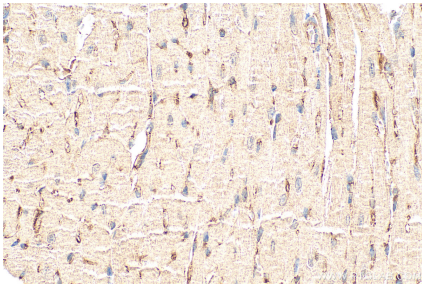
Various lysates were subjected to SDS PAGE followed by western blot with 33225-1-AP (PHLDB1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



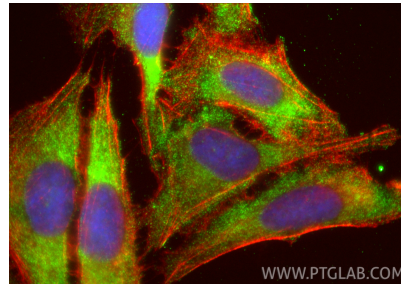
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 33225-1-AP (PHLDB1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).