

### Prohibitin (PHB1) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2710a

### **Specification**

### Prohibitin (PHB1) Antibody (N-term) - Product Information

Application IHC-P, WB, FC,E

Primary Accession P35232

Other Accession
Reactivity
Predicted

P84173, Q3T165
Human, Mouse
Bovine, Chicken

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 29804
Antigen Region 92-121

# Prohibitin (PHB1) Antibody (N-term) - Additional Information

#### **Gene ID 5245**

### **Other Names**

Prohibitin, PHB

### Target/Specificity

This Prohibitin (PHB1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-121 amino acids from the N-terminal region of human Prohibitin (PHB1).

#### **Dilution**

IHC-P~~1:100 WB~~1:2000

FC~~1:10~50

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Prohibitin (PHB1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Prohibitin (PHB1) Antibody (N-term) - Protein Information



# Name PHB1 {ECO:0000303|PubMed:28017329, ECO:0000312|HGNC:HGNC:8912}

**Function** Protein with pleiotropic attributes mediated in a cell- compartment- and tissue-specific manner, which include the plasma membrane-associated cell signaling functions, mitochondrial chaperone, and transcriptional co-regulator of transcription factors in the nucleus (PubMed:11302691, PubMed:20959514, PubMed:28017329, PubMed:31522117). Plays a role in adipose tissue and glucose homeostasis in a sex-specific manner (By similarity). Contributes to pulmonary vascular remodeling by accelerating proliferation of pulmonary arterial smooth muscle cells (By similarity).

#### **Cellular Location**

Mitochondrion inner membrane. Nucleus. Cytoplasm. Cell membrane

#### **Tissue Location**

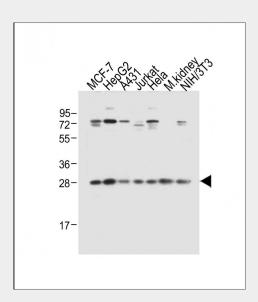
Widely expressed in different tissues.

### Prohibitin (PHB1) Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

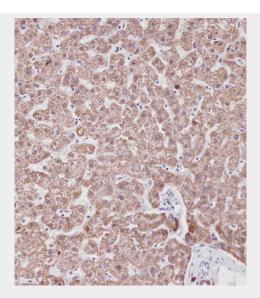
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Prohibitin (PHB1) Antibody (N-term) - Images

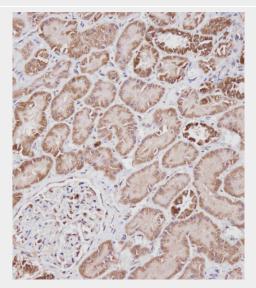


All lanes: Anti-Prohibitin (PHB1) Antibody (N-term) at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: A431 whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: Hela whole cell lysate Lane 6: Mouse kidney tissue lysate Lane 7: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



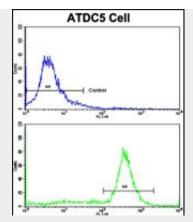


Immunohistochemical analysis of AP2710A on paraffin-embedded Human liver tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of AP2710A on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.





Flow cytometric analysis of ATDC5 cells using PHB1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# Prohibitin (PHB1) Antibody (N-term) - Background

Prohibitin is an evolutionarily conserved protein that is ubiquitously expressed. It is thought to be a negative regulator of cell proliferation and may be a tumor suppressor. Mutations have been linked to sporadic breast cancer. Prohibitin is expressed as two transcripts with varying lengths of 3' untranslated region.

# Prohibitin (PHB1) Antibody (N-term) - References

Gregory-Bass, R.C., Int. J. Cancer 122 (9), 1923-1930 (2008) Ross, J.A., J. Biol. Chem. 283 (8), 4699-4713 (2008) White, J.J., Genomics 11 (1), 228-230 (1991)