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# Prohibitin (PHB1) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2710a

## Product Information

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|---|---|
| **Application** | IHC-P, WB, FC, E |
| **Primary Accession** | P35232 |
| **Other Accession** | P84173, Q3T165 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Bovine, Chicken, Rat, Canine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB10625 |
| **Calculated MW** | 29804 |
| **Antigen Region** | 92-121 |

## Additional Information

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|---|---|
| **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~~1:100~500 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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. |

## Protein Information

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|---|---|
| **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.

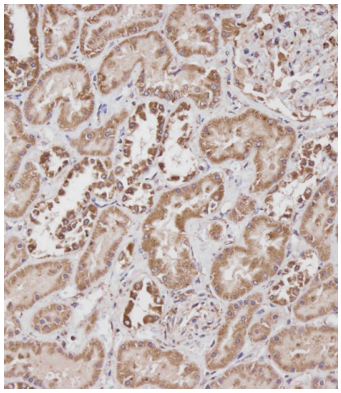
## Background

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.

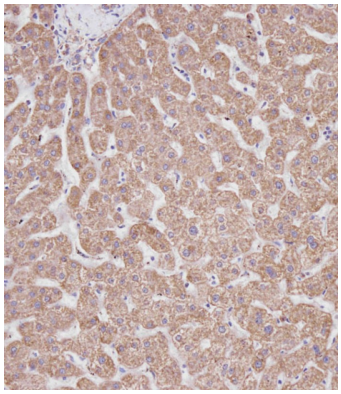
## References

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)

## Images

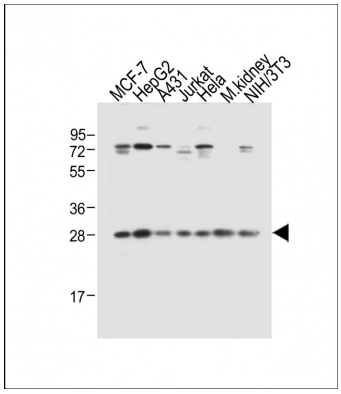


Immunohistochemical analysis of AP2710A on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted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

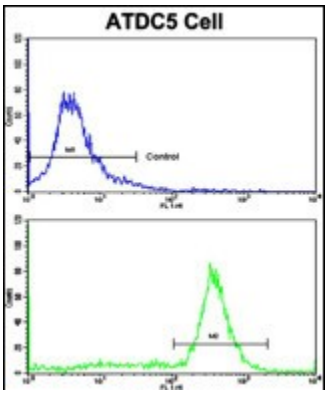


Immunohistochemical analysis of AP2710A on paraffin-embedded Human liver tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted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

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 IgG, (H+L), Peroxidase




conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




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.

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