

**PHB Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AW5065**

**Specification**

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**PHB Antibody - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P35232</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>H=30;M=30;Rat=30 KDa</b>
Isotype	<b>IgG2b,k</b>
Antigen Source	<b>HUMAN</b>

**PHB Antibody - Additional Information**

**Gene ID** 5245

**Antigen Region**  
1-205

**Other Names**  
Prohibitin, PHB

**Dilution**  
WB~~1:1000  
IHC-P~~1:25

**Target/Specificity**  
This antibody is generated from a mice immunized with a recombinant protein between 1-205 amino acids from human.

**Format**  
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**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**  
PHB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PHB Antibody - 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:<a href="http://www.uniprot.org/citations/11302691" target="\_blank">11302691</a>, PubMed:<a href="http://www.uniprot.org/citations/20959514" target="\_blank">20959514</a>, PubMed:<a href="http://www.uniprot.org/citations/28017329" target="\_blank">28017329</a>, PubMed:<a href="http://www.uniprot.org/citations/31522117" target="\_blank">31522117</a>). 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

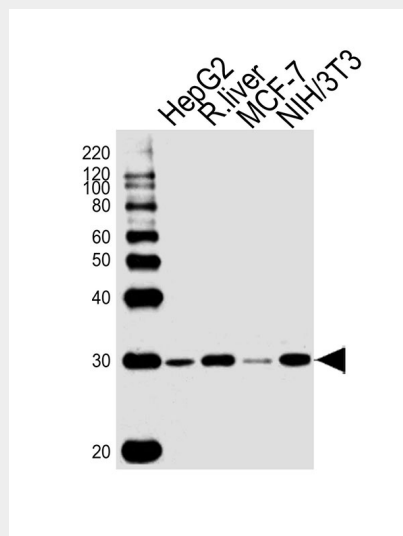
Widely expressed in different tissues.

### PHB Antibody - Protocols

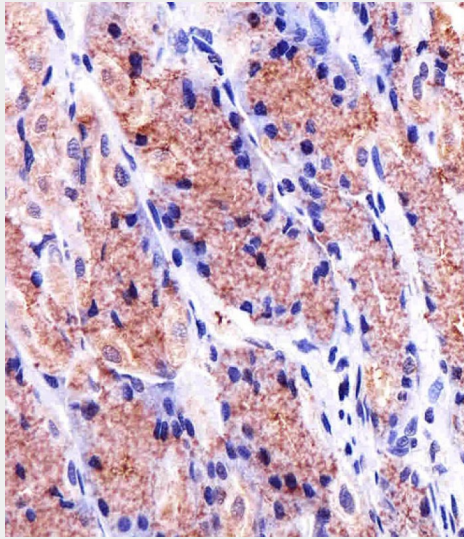
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### PHB Antibody - Images



Western blot analysis of lysates from HepG2 cell line, rat liver tissue, MCF-7, mouse NIH/3T3 cell line (from left to right), using PHB Antibody (Cat. #AW5065). AW5065 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Immunohistochemical analysis of paraffin-embedded H. stomach section using PHB Antibody(Cat#AW5065). AW5065 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

#### **PHB Antibody - Background**

Prohibitin inhibits DNA synthesis. It has a role in regulating proliferation. As yet it is unclear if the protein or the mRNA exhibits this effect. May play a role in regulating mitochondrial respiration activity and in aging.

#### **PHB Antibody - References**

- Sato T.,et al.Cancer Res. 52:1643-1646(1992).
- Sato T.,et al.Genomics 17:762-764(1993).
- Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
- Bienvenut W.V.,et al.Submitted (MAR-2005) to UniProtKB.
- Lubec G.,et al.Submitted (DEC-2008) to UniProtKB.