

**PHB Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2247b**

## Specification

---

### PHB Antibody - Product Information

Application	WB, IHC-P,E
Primary Accession	<a href="#">P35232</a>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Calculated MW	29804
Antigen Region	1-205

### PHB Antibody - Additional Information

**Gene ID** 5245

**Other Names**  
Prohibitin, PHB

#### Target/Specificity

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

#### Dilution

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

#### 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:[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

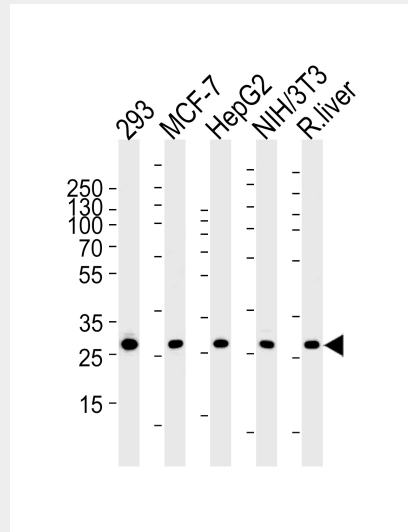
Widely expressed in different tissues.

### PHB Antibody - Protocols

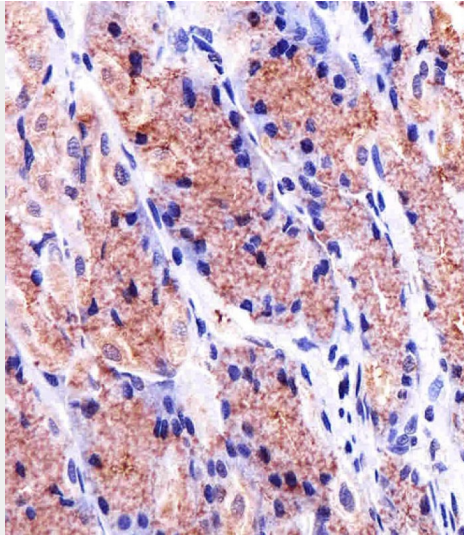
Provided below are standard protocols that you may find useful for product applications.

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

### PHB Antibody - Images



Western blot analysis of lysates from 293, MCF-7, HepG2, mouse NIH/3T3 cell line and rat liver tissue (from left to right), using USF1 Antibody (Center) (Cat. #AM2247b). AM2247b was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35µg per lane.



Immunohistochemical analysis of paraffin-embedded H. stomach section using PHB Antibody(Cat#AM2247b). AM2247b 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.