

### PHB Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM2247b

### Specification

# PHB Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P35232</u> Human, Mouse, Rat Mouse Monoclonal IgG2b,k 29804 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 IHC-P~~1:25 WB~~1:1000 E~~Use at an assay dependent concentration.

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:<u>11302691</u>, PubMed:<u>20959514</u>, PubMed:<u>28017329</u>, PubMed:<u>31522117</u>). 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

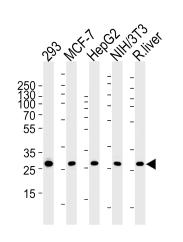
**Tissue Location** Widely expressed in different tissues.

# **PHB Antibody - Protocols**

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

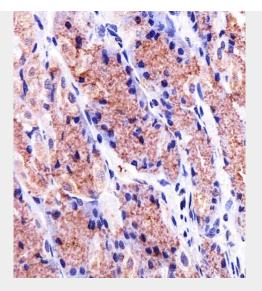
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **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.