

**PHB / Prohibitin Antibody (clone 3F4-2B2)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14057**

**Specification**

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**PHB / Prohibitin Antibody (clone 3F4-2B2) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">P35232</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	30kDa KDa

**PHB / Prohibitin Antibody (clone 3F4-2B2) - Additional Information**

**Gene ID** 5245

**Other Names**  
Prohibitin, PHB

**Target/Specificity**  
Human Prohibitin

**Reconstitution & Storage**  
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**  
PHB / Prohibitin Antibody (clone 3F4-2B2) is for research use only and not for use in diagnostic or therapeutic procedures.

**PHB / Prohibitin Antibody (clone 3F4-2B2) - 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

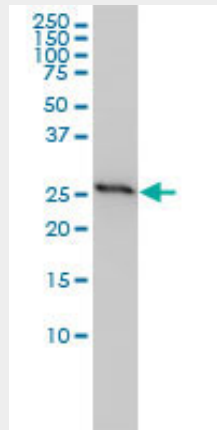
Widely expressed in different tissues.

### PHB / Prohibitin Antibody (clone 3F4-2B2) - Protocols

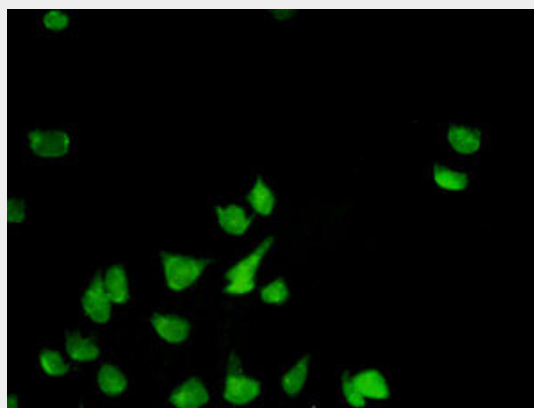
Provided below are standard protocols that you may find useful for product applications.

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

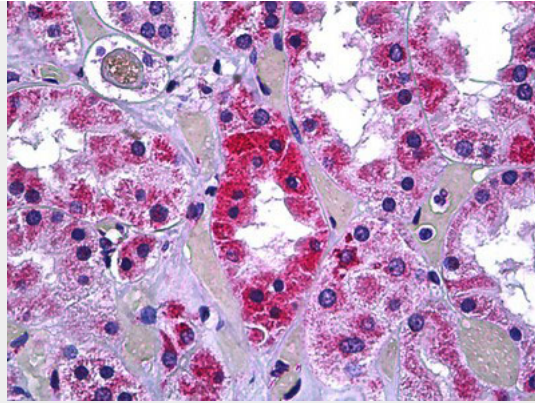
### PHB / Prohibitin Antibody (clone 3F4-2B2) - Images



PHB monoclonal antibody clone 3F4-2B2 Western blot of PHB expression in HeLa.



Immunofluorescence of monoclonal antibody to PHB on HeLa cell. [antibody concentration 1 ~10 ug/ml].



Anti-PHB / Prohibitin antibody IHC of human kidney, tubules.

#### **PHB / Prohibitin Antibody (clone 3F4-2B2) - 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 / Prohibitin Antibody (clone 3F4-2B2) - 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.
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Zody M.C.,et al.Nature 440:1045-1049(2006).