

Anti-Prohibitin Antibody
Catalog # ABO11235**Specification**

Anti-Prohibitin Antibody - Product Information

Application	WB, IHC-P, ICC
Primary Accession	P35232
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Prohibitin(PHB) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Prohibitin Antibody - Additional Information

Gene ID 5245

Other Names

Prohibitin, PHB

Calculated MW

29804 MW KDa

Application Details

Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Mitochondrion inner membrane .

Tissue Specificity

Widely expressed in different tissues.

Protein Name

Prohibitin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Prohibitin(240-256aa KLEAAEDIAYQLSRSRN), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Prohibitin 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

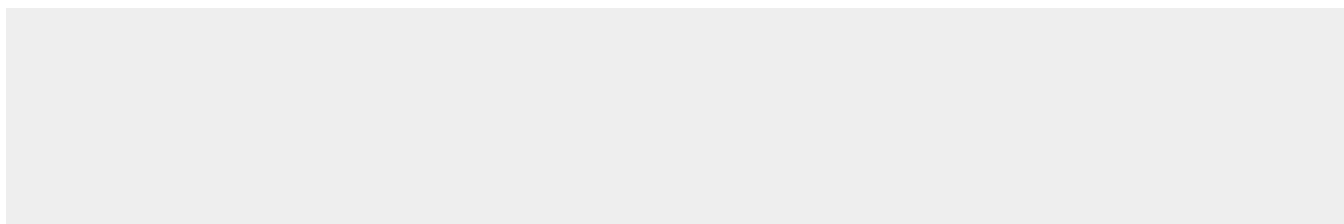
Tissue Location

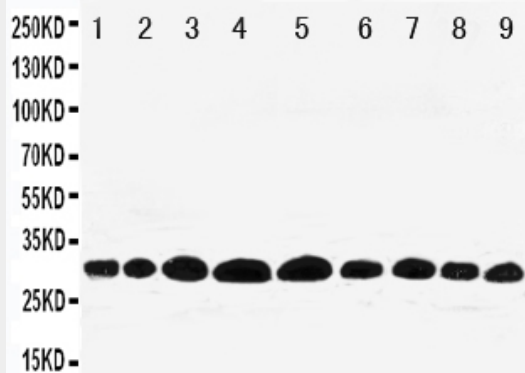
Widely expressed in different tissues.

Anti-Prohibitin Antibody - Protocols

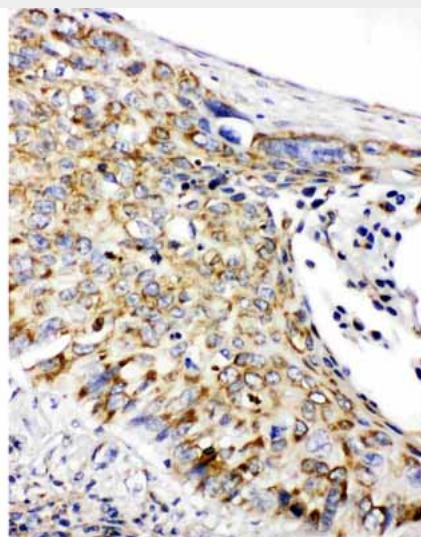
Provided below are standard protocols that you may find useful for product applications.

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

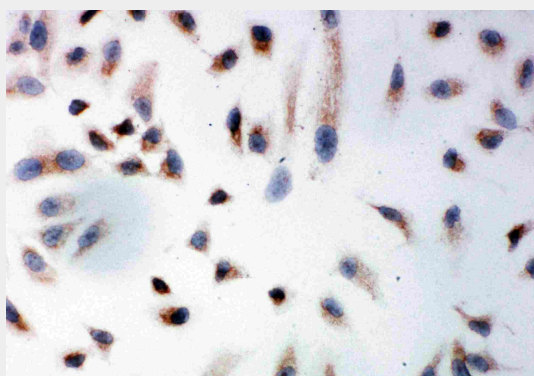
Anti-Prohibitin Antibody - Images



Anti-Prohibitin antibody, ABO11235, Western blotting
Lane 1: Rat Lung Tissue Lysate
Lane 2: Rat Skeletal Muscle Tissue Lysate
Lane 3: Rat Brain Tissue Lysate
Lane 4: Rat Kidney Tissue Lysate
Lane 5: HELA Cell Lysate
Lane 6: MCF-7 Cell Lysate
Lane 7: PC-12 Cell Lysate
Lane 8: A549 Cell Lysate
Lane 9: SMMC Cell Lysate



Anti-Prohibitin antibody, ABO11235, IHC(P)
IHC(P): Human Lung Cancer Tissue



Anti-Prohibitin antibody, ABO11235, ICC
ICC: HELA Cell

Anti-Prohibitin Antibody - Background

PHB(Prohibitin), also known as PHB1, is a protein that in humans is encoded by the PHB gene. White et al.(1991) mapped the PHB gene to chromosome 17 by analysis of human-mouse somatic

cell hybrid cell lines using a genomic fragment of human prohibitin DNA isolated from a library using the rat prohibitin cDNA clone. By in situ hybridization, they localized the gene to 17q21. Sato et al.(1992) isolated the human homolog of the rat prohibitin gene and mapped it to 17q12-q21 by in situ hybridization. Proliferation of tumor cells depends on new blood vessel formation(angiogenesis) that accompanies malignant progression. Anticancer therapies using angiogenesis inhibitors or cytotoxic agents targeted to the vasculature of tumors have been evaluated in clinical trials. Although white fat is a nonmalignant tissue, it has the capability to quickly proliferate and expand. Furthermore, it is highly vascularized. Rupnick et al.(2002) showed that nonspecific angiogenesis inhibitors can prevent the development of obesity of mice.