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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 r˚Constitution, 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 Cytomety
- Cell Culture

Anti-Prohibitin Antibody - Images

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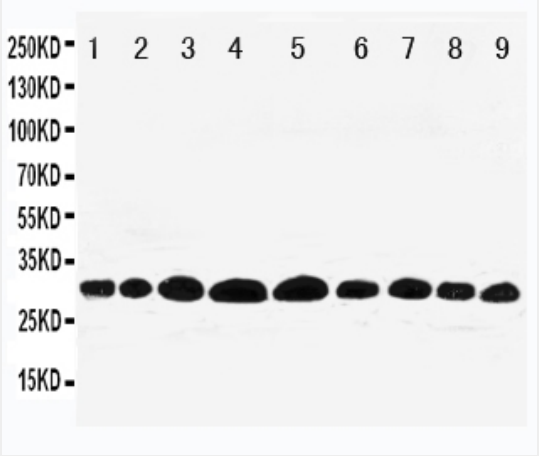
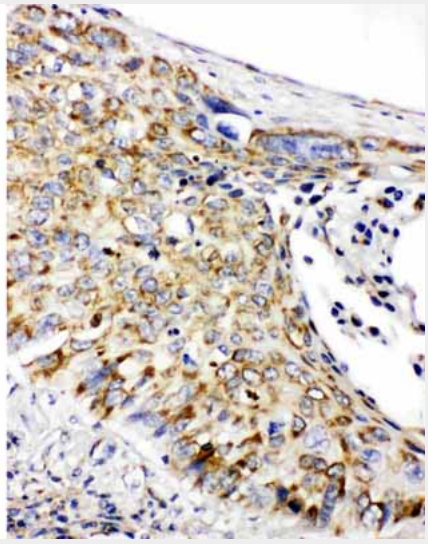
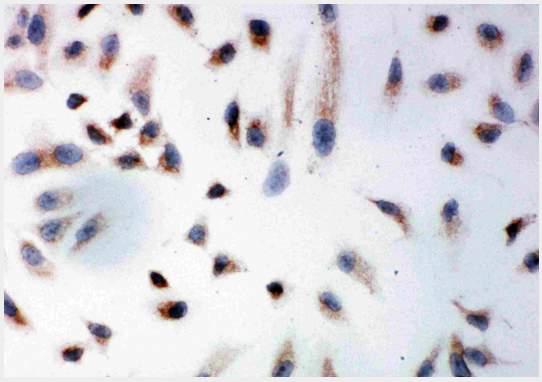


Anti-Prohibitin antibody, ABO11235, Western blottingLane 1: Rat Lung Tissue LysateLane 2: Rat Skeletal Muscle Tissue LysateLane 3: Rat Brain Tissue LysateLane 4: Rat Kidney Tissue LysateLane 5: HELA Cell LysateLane 6: MCF-7 Cell LysateLane 7: PC-12 Cell LysateLane 8: A549 Cell LysateLane 9: SMMC Cell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



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



Anti-Prohibitin antibody, ABO11235, ICCICC: 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.