

Anti-Prohibitin PHB Rabbit Monoclonal Antibody

Catalog # ABO14030

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P35232
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Prohibitin PHB Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	5245
Other Names	Prohibitin 1, PHB1 {ECO:0000303 PubMed:28017329, ECO:0000312 HGNC:HGNC:8912}
Calculated MW	29804
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:30 FC 1:30
Subcellular Localization	Mitochondrion inner membrane.
Tissue Specificity	Widely expressed in different tissues.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: DIF-16
Immunogen	A synthesized peptide derived from human Prohibitin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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.

Images

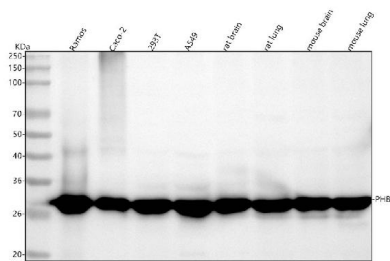
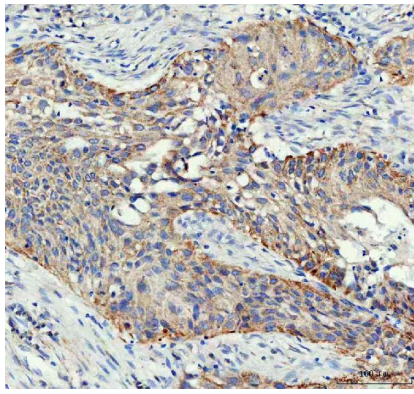


Figure 1. Western blot analysis of PHB using anti-PHB antibody (M01178). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Ramos whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: human A549 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat lung tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse lung tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PHB antigen affinity purified monoclonal antibody (Catalog # M01178) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PHB at approximately 30 kDa. The expected band size for PHB is at 30 kDa.

Figure 2. IHC analysis of PMB using anti-PMB antibody (M01178). PMB was detected in a paraffin-embedded section of human bladder cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-PMB Antibody (M01178) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was



used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.