

PHB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2710C

Product Information

Application	IHC-P, WB, IF, FC, E
Primary Accession	P35232
Other Accession	P84173 , Q3T165
Reactivity	Human
Predicted	Bovine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17513
Calculated MW	29804
Antigen Region	89-117

Additional Information

Gene ID	5245
Other Names	Prohibitin, PHB
Target/Specificity	This PHB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-117 amino acids from the Central region of human PHB.
Dilution	IHC-P~~1:100~500 WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

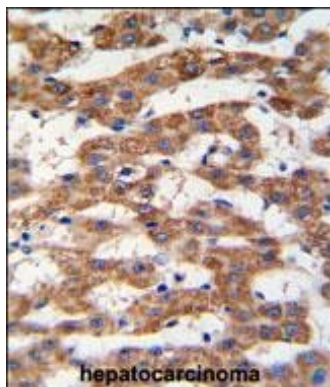
Background

Prohibitin is an evolutionarily conserved protein that is ubiquitously expressed. It is thought to be a negative regulator of cell proliferation and may be a tumor suppressor. Mutations have been linked to sporadic breast cancer. Prohibitin is expressed as two transcripts with varying lengths of 3' untranslated region.

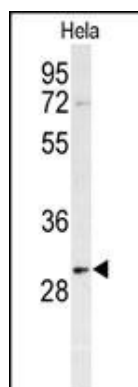
References

Gregory-Bass,R.C., Int. J. Cancer 122 (9), 1923-1930 (2008)
Ross,J.A., J. Biol. Chem. 283 (8), 4699-4713 (2008)
White,J.J., Genomics 11 (1), 228-230 (1991)

Images

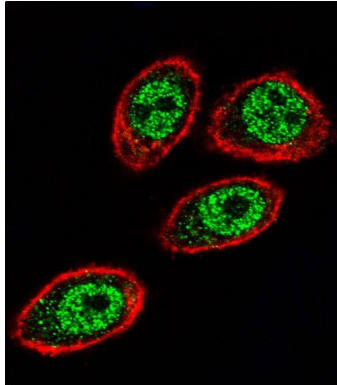
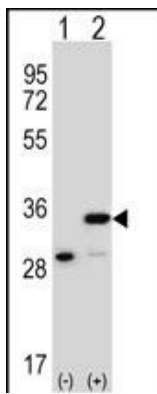


Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with PHB antibody (Center) (Cat. #AP2710c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

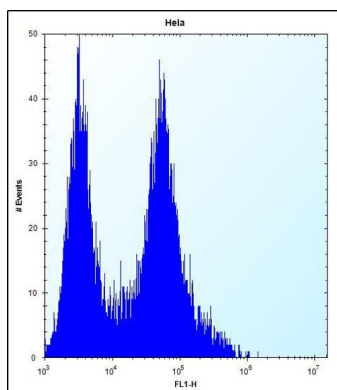


Western blot analysis of PHB Antibody (Center) (Cat.#AP2710c) in HeLa cell line lysates (35ug/lane). PHB (arrow) was detected using the purified Pab.

Western blot analysis of PHB (arrow) using rabbit polyclonal PHB Antibody (Center) (Cat.#AP2710c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PHB gene.



Confocal immunofluorescent analysis of PHB Antibody (Center)(Cat#AP2710c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).



PHB Antibody (Center) (Cat. #AP2710c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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