

PHB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2710C

Specification

PHB Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region IHC-P, WB, IF, FC,E <u>P35232</u> <u>P84173, 03T165</u> Human Bovine, Chicken Rabbit Polyclonal Rabbit IgG 89-117

PHB Antibody (Center) - 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~~1:10~50 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.

PHB Antibody (Center) - 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:<u>11302691</u>, PubMed:<u>20959514</u>, PubMed:<u>28017329</u>, PubMed:<u>31522117</u>). 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

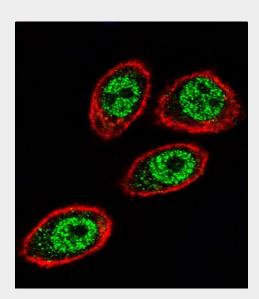
Tissue Location Widely expressed in different tissues.

PHB Antibody (Center) - Protocols

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

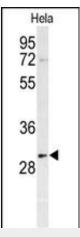
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PHB Antibody (Center) - Images

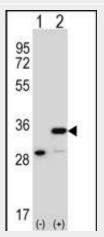


Confocal immunofluorescent analysis of PHB Antibody (Center)(Cat#AP2710c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).

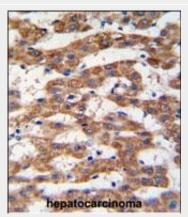




Western blot analysis of PHB Antibody (Center) (Cat.#AP2710c) in Hela cell line lysates (35ug/lane). PHB (arrow) was detected using the purified Pab.

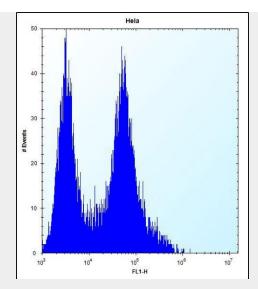


Western blot analysis of PHB (arrow) using rabbit polyclonal PHB Antibody (Center) (Cat.#AP2710c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PHB gene.



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.





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.

PHB Antibody (Center) - 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.

PHB Antibody (Center) - 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)