



PHB2 Antibody (Y248)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7270e

Product Information

Application WB, IHC-P-Leica, E

Primary Accession <u>Q99623</u>

Other Accession <u>Q5XIH7</u>, <u>Q35129</u>, <u>Q2HI97</u>, <u>NP 009204</u>

Reactivity Human, Mouse, Rat

Predicted Rat, Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB15576
Calculated MW 33296
Antigen Region 225-255

Additional Information

Gene ID 11331

Other Names Prohibitin-2, B-cell receptor-associated protein BAP37, D-prohibitin, Repressor

of estrogen receptor activity, PHB2 {ECO:0000312|EMBL:AAH147661,

ECO:0000312 | HGNC:HGNC:30306}

Target/Specificity This PHB2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 225-255 amino acids from human

PHB2.

Dilution WB~~1:1000 IHC-P-Leica~~1:500 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

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 PHB2 Antibody (Y248) is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name PHB2 {ECO:0000312|EMBL:AAH14766.1, ECO:0000312|HGNC:HGNC:30306}

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 and sex steroid hormones in the nucleus.

Cellular Location Mitochondrion inner membrane. Cytoplasm. Nucleus. Cell membrane

Note=Localizes within both nucleus and cytoplasm in proliferative primary myoblasts and mostly within the nucleus of differentiated primary myoblasts.

[Isoform 2]: Mitochondrion inner membrane

Tissue Location Expressed in myoblasts.

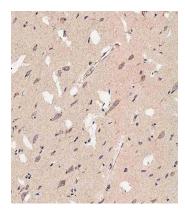
Background

PHB2 acts as a mediator of transcriptional repression by nuclear hormone receptors via recruitment of histone deacetylases. It functions as an estrogen receptor (ER)-selective coregulator that potentiates the inhibitory activities of antiestrogens and represses the activity of estrogens. It competes with NCOA1 for modulation of ER transcriptional activity and is probably involved in regulating mitochondrial respiration activity and in aging.

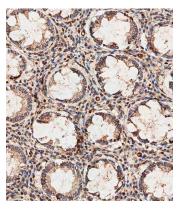
References

Takata, H., Curr. Biol. 17 (15), 1356-1361 (2007) Kasashima, K., J. Biol. Chem. 281 (47), 36401-36410 (2006)

Images

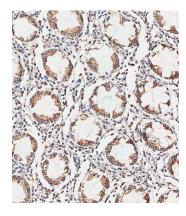


Immunohistochemical analysis of AP7270E on paraffin-embedded human brain tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

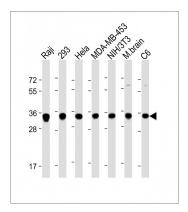


Immunohistochemical analysis of AP7270E on paraffin-embedded human colon tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded human colon tissue using AP7270E performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat



mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



All lanes: Anti-PHB2 Antibody (Y248) at 1:2000 dilution Lane 1: Raji whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: MDA-MB-453 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: Mouse brain lysate Lane 7: C6 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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