

Mouse REA/PHB2 Monoclonal Antibody | anti-PHB2 antibody

Anti-REA/PHB2 Antibody (monoclonal, 2B5)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19374	Mouse	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

REA/PHB2; Monoclonal Antibody; Anti-REA/PHB2 Antibody (monoclonal; 2B5); PHB2; BAP; REA; Prohibitin-2; B-cell receptor-associated protein BAP37; D-prohibitin; Repressor of estrogen receptor activity; prohibitin 2; anti-PHB2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	2B5
Specificity	Mouse IgG monoclonal antibody for REA/PHB2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-PHB2 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat FC/FACS/FCM: 1-3ug/1x106 cells Human
Immunogen	E Coli-derived human REA/PHB2 recombinant protein (Position: M1-K299).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of HepG2 cells using anti-REA/PHB2 antibody (AAA19374). Overlay histogram showing HepG2 cells stained with AAA19374 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-REA/PHB2 Antibody (AAA19374, 1µg/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG (BA1126, 5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 7. IHC analysis of REA/PHB2 using anti-REA/PHB2 antibody (AAA19374). REA/PHB2 was detected in paraffin-embedded section of rat colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-REA/PHB2 Antibody (AAA19374) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



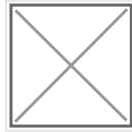
IHC (Immunohistochemistry)

Figure 6. IHC analysis of REA/PHB2 using anti-REA/PHB2 antibody (AAA19374). REA/PHB2 was detected in paraffin-embedded section of mouse colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-REA/PHB2 Antibody (AAA19374) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



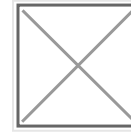
IHC (Immunohistochemistry)

Figure 5. IHC analysis of REA/PHB2 using anti-REA/PHB2 antibody (AAA19374). REA/PHB2 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-REA/PHB2 Antibody (AAA19374) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 4. IHC analysis of REA/PHB2 using anti-REA/PHB2 antibody (AAA19374). REA/PHB2 was detected in paraffin-embedded section of human renal clear cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-REA/PHB2 Antibody (AAA19374) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of REA/PHB2 using anti-REA/PHB2 antibody (AAA19374). REA/PHB2 was detected in paraffin-embedded section of human ovarian serous adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-REA/PHB2 Antibody (AAA19374) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-PHB2 antibody	PHB2(Prohibitin 2), also called Repressor of Estrogen Receptor Activity(REA), is a protein that in humans is encoded by the PHB2 gene. The International Radiation Hybrid Mapping Consortium mapped the PHB2 gene to chromosome 12. Montano et al. (1999) showed that REA enhanced the potency of a dominant-negative ER-alpha mutant and antiestrogens as suppressors of ER-alpha activity in Chinese hamster ovary cells. When coexpressed with wildtype ER-alpha or ER-beta(ESR2), REA suppressed activation of a reporter gene in a dose-dependent manner. REA had no effect on reporter activity in the absence of liganded ER, and it had no effect on the transcriptional activities of other hormone receptors. Mutation analysis showed that an N-terminal domain and a central domain of REA were required for its repressor activity.
References	1. Merkwirth, C., Dargazanli, S., Tatsuta, T., Geimer, S., Lower, B., Wunderlich, F. T., von Kleist-Retzow, J. -C., Waisman, A., Westermann, B., Langer, T. Prohibitins control cell proliferation and apoptosis by regulating OPA1-dependent cristae morphogenesis in mitochondria. <i>Genes Dev.</i> 22: 476-488, 2008. 2. Montano, M. M., Ekena, K., Delage-Mourroux, R., Chang, W., Martini, P., Katzenellenbogen, B. S. An estrogen receptor-selective coregulator that potentiates the effectiveness of antiestrogens and represses the activity of estrogens. <i>Proc. Nat. Acad. Sci.</i> 96: 6947-6952, 1999. 3. Mussi, P., Liao, L., Park, S. -E., Ciana, P., Maggi, A., Katzenellenbogen, B. S., Xu, J., O'Malley, B. W. Haploinsufficiency of the corepressor of estrogen receptor activity (REA) enhances estrogen receptor function in the mammary gland. <i>Proc. Nat. Acad. Sci.</i> 103: 16716-16721, 2006.

NCBI AND UNIPROT INFORMATION

NCBI GI #	74752151
NCBI GeneID	11331
UniProt Accession #	Q99623 ; Q2YDA4 ; Q7KYU3 ; Q92978 ; B4DP75
Molecular Weight	299
NCBI Official Full Name	Prohibitin-2
NCBI Official Synonym Full Names	prohibitin 2
NCBI Official Symbol	PHB2

NCBI Official Synonym Symbols	BAP; REA; p22; Bap37; BCAP37; PNAS-141
NCBI Protein Information	prohibitin-2; PHB2; D-prohibitin; B-cell associated protein; repressor of estrogen receptor activity; B-cell receptor-associated protein BAP37
UniProt Protein Name	Prohibitin-2
UniProt Gene Name	PHB2
UniProt Entry Name	PHB2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/rea-phb2-antibody-clone-2b5-western-blot-immunohistochemistry-flow-cytometry-elisa/19374>