

**Anti-REA Antibody**  
**Catalog # ABO11257****Specification**

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**Anti-REA Antibody - Product Information**

Application	WB, IHC-P, ICC
Primary Accession	<a href="#">Q99623</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Prohibitin-2(PHB2) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-REA Antibody - 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:AAH14766.1, ECO:0000312|HGNC:HGNC:30306}

**Calculated MW**

33296 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse,  
Rat<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By  
Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Mitochondrion inner membrane . Cytoplasm . Nucleus . Also cytoplasmic and nuclear. .

**Protein Name**

Prohibitin-2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human REA(111-128aa RPNAQELPSMYQRLGLDY), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-REA Antibody - 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

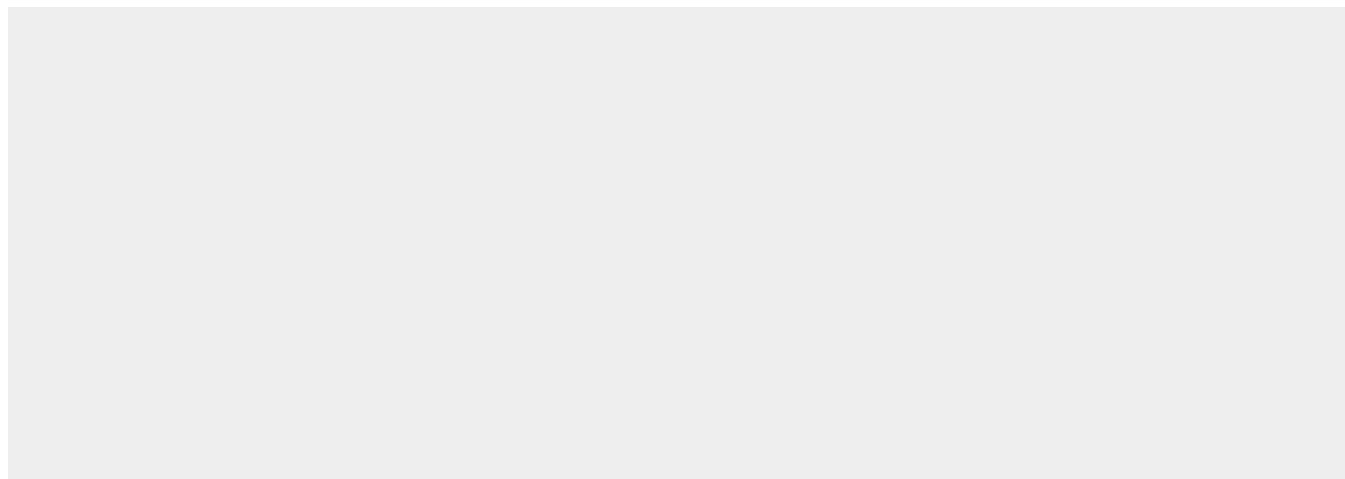
**Tissue Location**

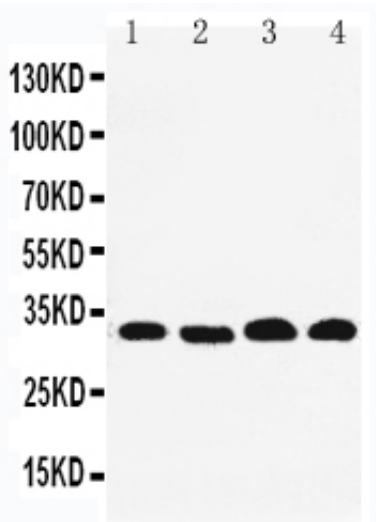
Expressed in myoblasts.

**Anti-REA Antibody - Protocols**

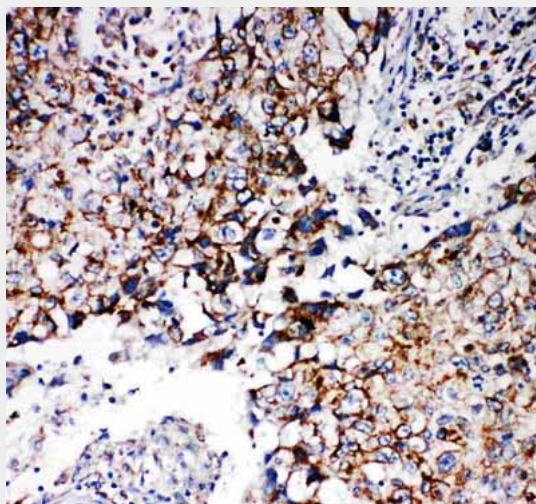
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

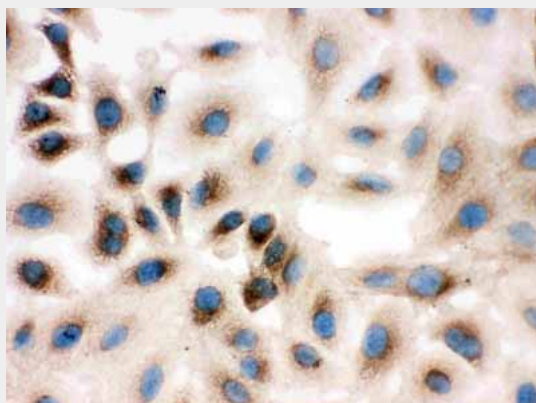
**Anti-REA Antibody - Images**



Anti-REA antibody, ABO11257, Western blotting  
Lane 1: PANC Cell Lysate  
Lane 2: COLO320 Cell Lysate  
Lane 3: U87Cell Lysate  
Lane 4: HEPA Cell Lysate



Anti-REA antibody, ABO11257, IHC(P)  
IHC(P): Human Lung Cancer Tissue



Anti-REA antibody, ABO11257, ICC  
ICC: A549 Cell

### Anti-REA Antibody - Background

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.