



Rabbit Anti-REA antibody

SL10283R

Product Name:	REA
Chinese Name:	Blymphocyte受体相关蛋白抗体
Alias:	B cell receptor associated protein BAP37; B-cell associated protein; B-cell receptor-associated protein BAP37; Bap 37; BAP; Bap37; BCAP 37; BCAP37; D prohibitin; D-prohibitin; MGC117268; p22; PHB 2; PHB2; PHB2_HUMAN; PNAS 141; PNAS141; Prohibitin 2; Prohibitin-2; Prohibitin2; Repressor of Estrogen Receptor Activity.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human REA:281-299/299
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The prohibitins, called PHB1 and PHB2, are highly conserved proteins that are present in nuclear and mitochondrial compartments in eukaryotic cells and exert multiple cellular functions (1). PHB2 (REA) was originally identified as an estrogen receptor (ER) specific coregulator. It directly interacts with hormone-bound ER and represses its

transcriptional activity by competitive inhibition of SRC-1 coactivation of ER (2,3). Together with COUP-TFs, PHB2 also interacts with histone deacetylases HDAC1 and HDAC5, and mediates transcriptional regulation by ER through coupling the deacetylase to the transcription activation complex (4). Another important function of PHB2 is stabilization of mitochondrial proteins. PHB1/PHB2 heterodimers form large ring complexes on the mitochondrial membrane (5), acting as chaperones to stabilize important mitochondrial proteins, such as OPA1 and Hax1 to support mitochondrial morphogenesis and protection against apoptosis (6-8).

Function:

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

Subunit:

Interacts with PHB, ESR1, HDAC1 and HDAC5. Interacts with ZNF703.

Subcellular Location:

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

Similarity:

Belongs to the prohibitin family.

SWISS:

Q99623

Gene ID:

11331

Database links:

[Entrez Gene: 11331](#) Human

[Entrez Gene: 12034](#) Mouse

[Entrez Gene: 114766](#) Rat

[Omim: 610704](#) Human

[SwissProt: Q99623](#) Human

[SwissProt: O35129](#) Mouse

[SwissProt: Q5XIH7](#) Rat

[Unigene: 504620](#) Human

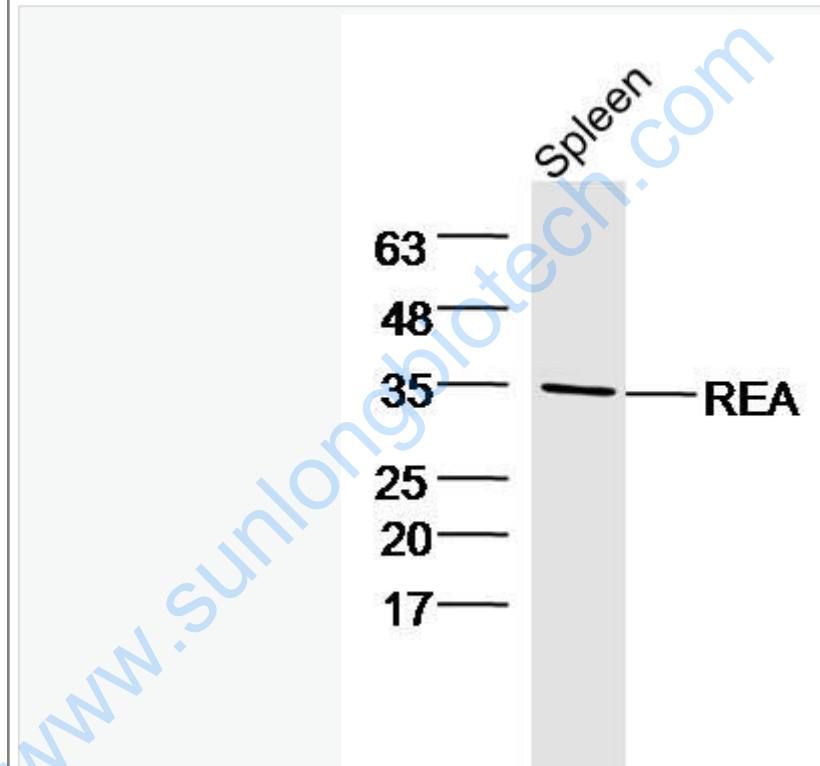
[Unigene: 36241](#) Mouse

[Unigene: 64535](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



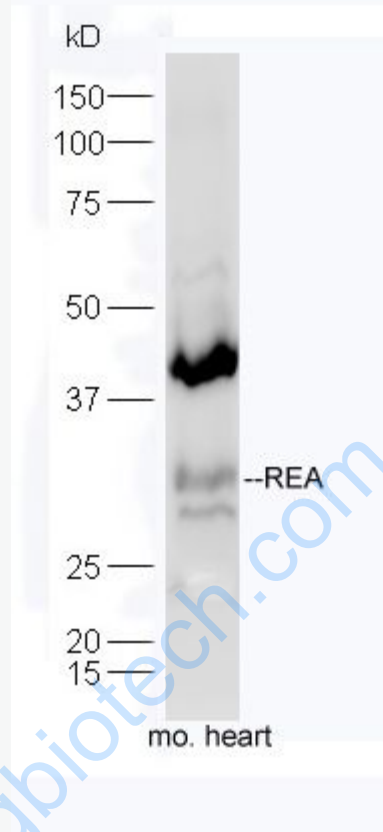
Protein: spleen(mouse) lysate at 40ug;

Primary: rabbit Anti-REA (SL10283R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL10283R) at 1: 5000;

Predicted band size: 33 kD

Observed band size: 35 kD



Sample:

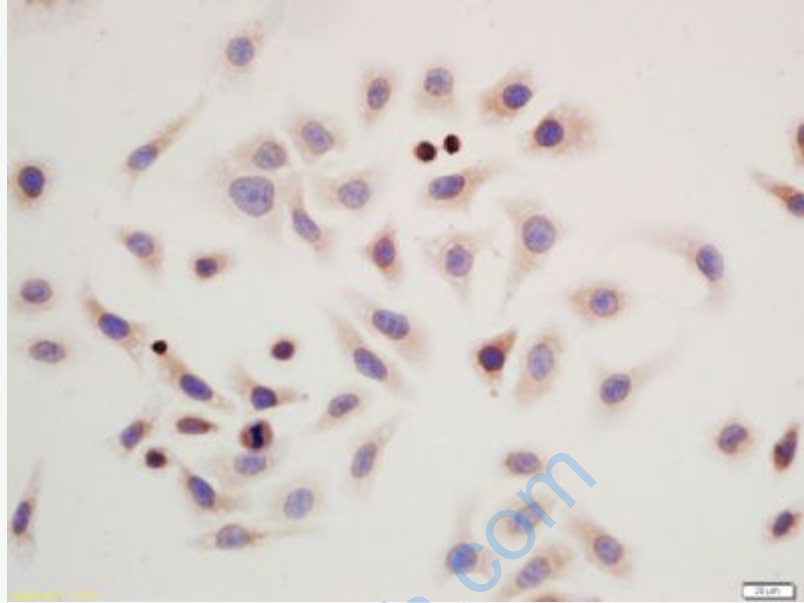
heart (Mouse) Lysate at 40 ug

Primary: Anti-REA (SL10283R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33 kD

Observed band size: 33 kD



Tissue/cell: colonic epithelial cells;

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-REA Polyclonal Antibody, Unconjugated(SL10283R) 1:100, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining