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Rabbit Anti-phospho-PLB (Ser16) antibody

SL2984R

Product Name:	phospho-PLB (Ser16)
Chinese Name:	磷酸化心脏磷蛋白抗体
Alias:	Phospholamban (phospho S16); p-Phospholamban (phospho S16); p-PLB(S16); Cardiac phospholamban; CMD1P; PLB; PLN; PPLA_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,
Applications:	ELISA=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:	5.7kDa
Cellular localization:	cytoplasmicThe cell membraneMitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Cardiac phospholamban around the phosphorylation site of Ser16:RA(p-S)TI
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:	Defects in PLN are the cause of cardiomyopathy dilated type 1P (CMD1P) . Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. Defects in PLN are the cause of cardiomyopathy familial hypertrophic

type 18 (CMH18) . CMH18 is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

Function:
Phospholamban has been postulated to regulate the activity of the calcium pump of cardiac sarcoplasmic reticulum.

Subunit:
Homopentamer. Interacts with HAX1.

Subcellular Location:
Mitochondrion membrane; Single-pass membrane protein. Sarcoplasmic reticulum.

Tissue Specificity:
Heart.

Post-translational modifications:
Phosphorylated at Thr-17 by CaMK2, and in response to beta-adrenergic stimulation. Phosphorylation by DMPK may stimulate sarcoplasmic reticulum calcium uptake in cardiomyocytes.

DISEASE:
[DISEASE] Defects in PLN are the cause of cardiomyopathy dilated type 1P (CMD1P) [MIM:609909]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.
[DISEASE] Defects in PLN are the cause of familial hypertrophic cardiomyopathy type 18 (CMH18) [MIM:613874]. CMH18 is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

Similarity:
Belongs to the phospholamban family.

SWISS:
P26678

Gene ID:
5350

Database links:

Entrez Gene: 5350Human

Entrez Gene: 18821Mouse

Entrez Gene: 64672Rat

Omim: 172405Human

SwissProt: P26677Chicken

SwissProt: A4IFH6Cow

SwissProt: P61012Dog

SwissProt: P26678Human

SwissProt: P61014Mouse

SwissProt: P61013Pig

SwissProt: P61015Rabbit

SwissProt: P61016Rat

Unigene: 170839Human

Unigene: 745010Human

Unigene: 34145Mouse

Unigene: 9740Rat

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