
Product Name: PLB (phospho Ser16/T17) Rabbit Polyclonal Antibody**Catalog #: APRab05281**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio WB 1:500-1:2000,IHC 1:50-1:300

Molecular Weight

Antigen Information

Gene Name	PLN
Alternative Names	PLN; PLB; Cardiac phospholamban; PLB
Gene ID	5350.0
SwissProt ID	P26678
Immunogen	The antiserum was produced against synthesized peptide derived from human PLN around the phosphorylation site of Ser16 and Thr17. AA range:1-50

Background

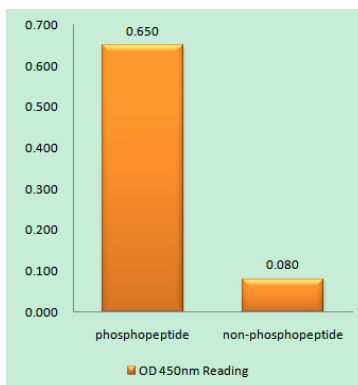
The protein encoded by this gene is found as a pentamer and is a major substrate for the cAMP-dependent protein kinase in

cardiac muscle. The encoded protein is an inhibitor of cardiac muscle sarcoplasmic reticulum Ca(2+)-ATPase in the unphosphorylated state, but inhibition is relieved upon phosphorylation of the protein. The subsequent activation of the Ca(2+) pump leads to enhanced muscle relaxation rates, thereby contributing to the inotropic response elicited in heart by beta-agonists. The encoded protein is a key regulator of cardiac diastolic function. Mutations in this gene are a cause of inherited human dilated cardiomyopathy with refractory congestive heart failure, and also familial hypertrophic cardiomyopathy. [provided by RefSeq, Apr 2016],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.,function:Phospholamban has been postulated to regulate the activity of the calcium pump of cardiac sarcoplasmic reticulum.,PTM:Phosphorylated in response to beta-adrenergic stimulation.,similarity:Belongs to the phospholamban family.,subunit:Homopentamer.,tissue specificity:Heart,

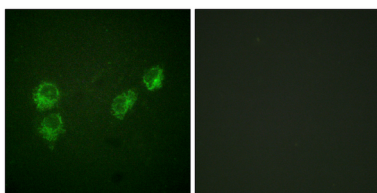
Research Area

Calcium;Dilated cardiomyopathy;

Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using PLB (Phospho-Ser16+Thr17) Antibody



Immunofluorescence analysis of HUVEC cells, using PLB (Phospho-Ser16+Thr17) Antibody. The picture on the right is blocked with the phospho peptide.