

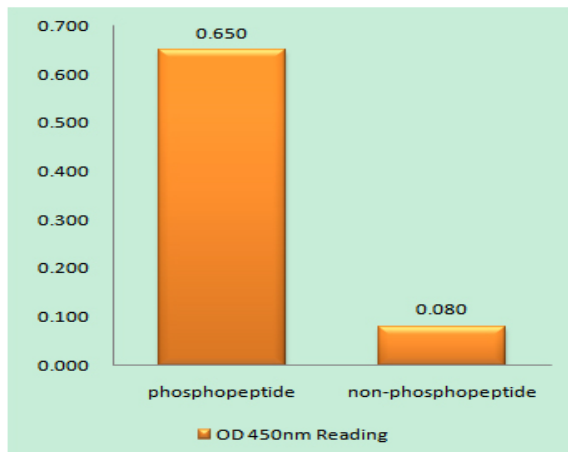
**PLB (phospho Ser16/T17) Polyclonal Antibody**

<b>Catalog No :</b>	YP1164
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC
<b>Target :</b>	PLB
<b>Fields :</b>	>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>Thyroid hormone signaling pathway;>>Dilated cardiomyopathy;>>Diabetic cardiomyopathy
<b>Gene Name :</b>	PLN
<b>Protein Name :</b>	Cardiac phospholamban
<b>Human Gene Id :</b>	5350
<b>Human Swiss Prot No :</b>	P26678
<b>Mouse Gene Id :</b>	18821
<b>Mouse Swiss Prot No :</b>	P61014
<b>Rat Gene Id :</b>	64672
<b>Rat Swiss Prot No :</b>	P61016
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human PLB around the phosphorylation site of Ser16 and Thr17. AA range:1-50
<b>Specificity :</b>	Phospho-PLB (S16/T17) Polyclonal Antibody detects endogenous levels of PLB protein only when phosphorylated at S16/T17.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

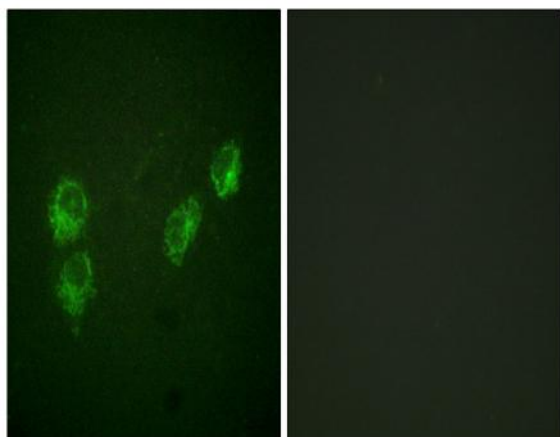
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	6kD
<b>Cell Pathway :</b>	Calcium;Dilated cardiomyopathy;
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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.,</p>
<b>Subcellular Location :</b>	<p>Endoplasmic reticulum membrane ; Single-pass membrane protein . Sarcoplasmic reticulum membrane ; Single-pass membrane protein . Mitochondrion membrane ; Single-pass membrane protein . Membrane ; Single-pass membrane protein . Colocalizes with HAX1 at the endoplasmic reticulum (PubMed:17241641). Colocalizes with DMPK a the sarcoplasmic reticulum (PubMed:15598648). .</p>
<b>Expression :</b>	Heart muscle (at protein level).
<b>Sort :</b>	12819
<b>No4 :</b>	1

**Host :** Rabbit**Modifications :** Phospho

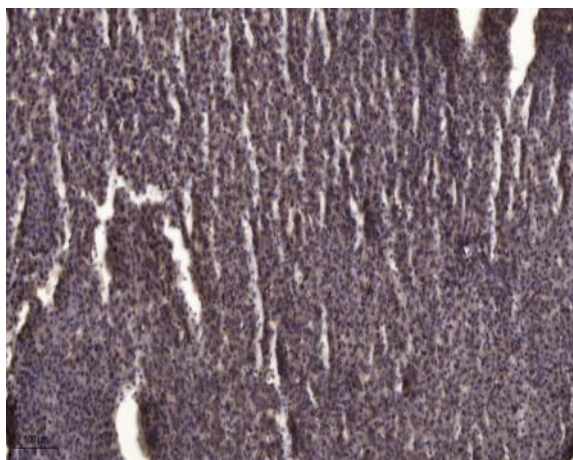
## Products Images



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.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).