PLB Monoclonal Antibody

Catalog No	YP-mAb-02759
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PLN
Protein Name	Cardiac phospholamban
Immunogen	The antiserum was produced against synthesized peptide derived from human PLB. AA range:1-50
Specificity	PLB Monoclonal Antibody detects endogenous levels of PLB protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PLN; PLB; Cardiac phospholamban; PLB
Observed Band	
Cell Pathway	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). .
Tissue Specificity	Heart muscle (at protein level).
Function	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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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