

Recombinant Human PLN

Cat. No. PLN-30732TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment corresponding to amino acids 1-30 of Human Phospholamban with an N terminal proprietary tag; Predicted MWt 28.93 kDa inclusive of tag.
Species	Human
Source	Wheat Germ
ProteinLength	30 amino acids
Description	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.
Molecular Weight	28.930kDa inclusive of tags
Tissue specificity	Heart.
Form	Liquid

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Purity	Proprietary Purification
Storage buffer	pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MEKVQYLTRSAIRRASTIEMPQQARQKLQN
Sequence Similarities	Belongs to the phospholamban family.

GENE INFORMATION

Gene Name	PLN phospholamban [Homo sapiens]
Official Symbol	PLN
Synonyms	PLN; phospholamban; PLB; cardiac phospholamban; CMD1P;
Gene ID	5350
mRNA Refseq	NM_002667
Protein Refseq	NP_002658
MIM	172405
Uniprot ID	P26678
Chromosome	6q22.1

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Location	
Pathway	Calcium Regulation in the Cardiac Cell, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Dilated cardiomyopathy, organism-specific biosystem; Dilated cardiomyopathy, conserved biosystem;
Function	ATPase inhibitor activity; calcium channel regulator activity; protein binding;

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