



# Anti-PLN (aa 1-30) polyclonal antibody (DPAB-DC2278)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

**Antigen 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.

**Immunogen**

PLN (AAH05269, 1 a.a. ~ 30 a.a) partial recombinant protein with GST tag. The sequence is MEKVQYLTRSAIRRASITIEMPQQARQKLQN

**Source/Host**

Mouse

**Species Reactivity**

Human

**Conjugate**

Unconjugated

**Applications**

WB (Recombinant protein), ELISA,

**Size**

50 µl

**Buffer**

50 % glycerol

**Preservative**

None

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">PLN phospholamban [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	PLN
<b>Synonyms</b>	PLN; phospholamban; PLB; CMD1P; CMH18; cardiac phospholamban;
<b>Entrez Gene ID</b>	<a href="#">5350</a>
<b>Protein Refseq</b>	<a href="#">NP_002658</a>
<b>UniProt ID</b>	<a href="#">P26678</a>
<b>Chromosome Location</b>	6q22.1
<b>Pathway</b>	Adrenergic signaling in cardiomyocytes; Calcium Regulation in the Cardiac Cell; Calcium signaling pathway; Dilated cardiomyopathy
<b>Function</b>	ATPase binding; ATPase inhibitor activity; calcium channel regulator activity; enzyme inhibitor activity