

Product Information

MemDX™ Membrane Protein Human PLN (Phospholamban) Full Length

Cat. No.: **MPC2030K**

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

This product is a 6.1 kDa Human PLN membrane protein expressed in *E.coli*. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

PLN

Protein Length

Full length

Protein Class

Transporter

Molecular Weight

6.1 kDa

TMD

1

Sequence

MEKVQYLTRSAIRRASITIEMPQQARQKLQNLFINFCLILICLLICIIVM
LL

Product Description

Expression Systems

E.coli

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

PLN

Full Name

Phospholamban

Introduction

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.

Alternative Names

PLN; PLB; CMD1P; CMH18; cardiac phospholamban; Phospholamban

Gene ID

[5350](#)

UniProt ID

[P26678](#)