



Recombinant human PLN (Full length) (DAGB174)

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

PRODUCT INFORMATION

Species	Human
Purity	> 80%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Conjugate	GST
Applications	ELISA
Molecular Weight	32kDa
Reconstitution	<p>Reconstitute at 0.25 µg/µl in 200 µl sterile water for short-term storage.</p> <p>Reconstitution with 200 µl 50% glycerol solution is recommended for longer term storage.</p> <p>If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used).</p> <p>Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.</p>
Stability	Store for up to 12 months at -20°C to -80°C as lyophilized powder.
Format	Protein lyophilized in sterile PBS (58 mM Na ₂ HPO ₄ , 17 mM NaH ₂ PO ₄ , 68 mM NaCl, 100 mM GSH, pH 8.0). Trehalose (5-8%) and mannitol (5-8%) protectants were added before lyophilization.
Size	50 µg
Preservative	None
Storage	<p>Short-term storage: Store at 2-8°C for two weeks.</p> <p>Long-term storage: Aliquot and store at -20°C to -80°C for up to 6 months, buffer containing</p>

50% glycerol is recommended for reconstitution. Avoid repeat freeze-thaw cycles.

Ship

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

BACKGROUND

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.

Keywords

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

GENE INFORMATION

Synonyms

phospholamban;PLB;CMD1P;CMH18;cardiac phospholamban

Entrez Gene ID

[5350](#)

UniProt ID

[P26678](#)
