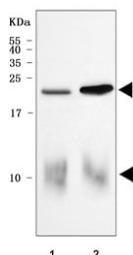


Cardiac Phospholamban Antibody / PLN / PLB (RQ7935)

Catalog No.	Formulation	Size
RQ7935	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P26678
Applications	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This Cardiac Phospholamban antibody is available for research use only.



Western blot testing of 1) rat heart and 2) mouse heart tissue lysate with Cardiac Phospholamban antibody. Predicted molecular weight: 6/12/18/24 kDa (monomer/dimer/oligomers).

Description

Phospholamban is a 52 amino acid integral membrane protein that regulates the Ca²⁺ pump in cardiac muscle and skeletal muscle cells. 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. Phospholamban is also expressed in slow-twitch skeletal muscle and some smooth muscle cells. It is observed that human ventricle and quadriceps displayed high levels of phospholamban transcripts and proteins, with markedly lower expression observed in smooth muscles, while the right atrium also expressed low levels of phospholamban. The structure of the human phospholamban gene closely resembles that reported for chicken, rabbit, rat, and mouse. Comparison of the human to other mammalian phospholamban genes

indicated a marked conservation of sequence for at least 217 bp upstream of the transcription start site.

Application Notes

Optimal dilution of the Cardiac Phospholamban antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids M1-Q23) was used as the immunogen for the Cardiac Phospholamban antibody.

Storage

After reconstitution, the Cardiac Phospholamban antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.