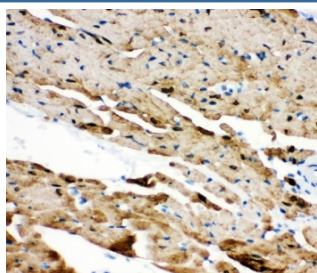


PLN Antibody / Phospholamban (R32038)

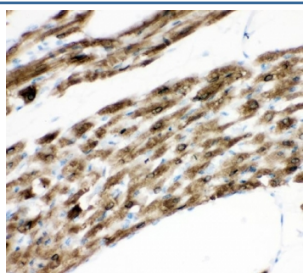
Catalog No.	Formulation	Size
R32038	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

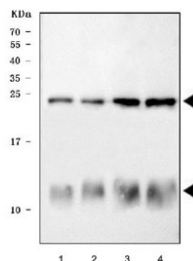
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P26678
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This PLN antibody is available for research use only.



IHC staining of FFPE mouse heart tissue with PLN antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat heart tissue with PLN antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) mouse heart, 2) rat heart, 3) human COLO320 and 4) human K562 lysate with PLN antibody. Predicted molecular weight: 6/18/24/36 kDa (monomer/oligomers).

Description

Phospholamban is a 52 amino acid integral membrane protein that regulates the Ca^{2+} 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 PLN antibody should be determined by the researcher.

Immunogen

Amino acids MEKVQYLTRSAIRRASTIEMPQQARQKLQNLFINF of human PLN were used as the immunogen for the PLN antibody.

Storage

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