



Product Information Sheet

Polyclonal Anti- Phospholamban

Catalogue No. PA1309

Lot No. 09H01

Ig type rabbit IgG

Size 100µg/vial

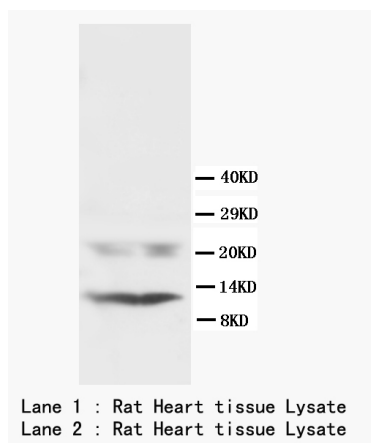
Specificity

Rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot



Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human Phospholamban, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

	Concen- tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Rat	Ms	-
IHC-P	-	-	-	-
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

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BACKGROUND

Phospholamban is a 52 amino acid integral membrane protein that regulates the Ca^{2+} pump in cardiac muscle and skeletal muscle cells.¹ 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. McTiernan et al. (1999) 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.²

REFERENCE

1. Rodriguez P, Kranias EG (December 2005). "Phospholamban: a key determinant of cardiac function and dysfunction". *Arch Mal Coeur Vaiss* 98 (12): 1239–43.
2. McTiernan, C. F.; Frye, C. S.; Lemster, B. H.; Kinder, E. A.; Ogletree-Hughes, M. L.; Moravec, C. S.; Feldman, A. M. : The human phospholamban gene: structure and expression. *J. Molec. Cell Cardiol.* 31: 679-692, 1999.