



Product Information Sheet

Polyclonal Anti- Phospholamban (*Magnetic Bead Conjugate*)

Catalogue No. PA1309-M

Lot No. 09H01

Ig type rabbit IgG

Size 100µg/vial

Specificity

Rat, mouse.

No cross reactivity with other proteins.

Recommended application

ImmunoPrecipitation (IP)

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.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

BACKGROUND

Phospholamban is a 52 amino acid integral membrane protein that regulates the Ca²⁺ 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.