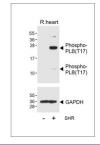


# Phospho-PBL Antibody / Phospholamban (Phospho-T17) (F55130)

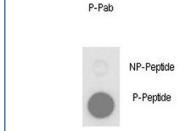
Catalog No.	Formulation	Size
F55130-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F55130-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

## **Bulk quote request**

Availability	1-2 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P26678
Applications	Western Blot : 1:500-1:1000 Dot Blot : 1:500
Limitations	This Phospho-PBL antibody is available for research use only.



Western blot testing of lysate from normal rat heart tissue and spontaneous hypertensive (SHR) rat heart tissue, using Phospho-PLB antibody.



Dot blot analysis using Phospho-PBL antibody. 50 nanograms of phos-peptide or nonphos-peptide per dot were spotted.

#### **Description**

Phospholamban is a small protein found in the sarcoplasmic reticulum of cardiac muscle cells, where it plays a crucial role in regulating the calcium ion concentration and ultimately the contraction of the heart muscle. Phosphorylated phospholamban is a form of the protein that has undergone a chemical modification in which phosphate groups are added to specific amino acid residues. This modification has been found to alter the interaction of phospholamban with other proteins and enzymes in the cell, leading to changes in calcium handling and cardiac contractility. Studies have demonstrated that phosphorylated phospholamban can enhance the function of the sarcoplasmic reticulum calcium pump, which is responsible for pumping calcium ions out of the cell after each contraction. This increased activity results in improved relaxation of the heart muscle and overall cardiac function. Furthermore, research has shown that abnormalities in phosphorylated phospholamban levels are associated with various cardiac conditions, including heart failure and arrhythmias.

### **Application Notes**

Titration of the Phospho-PBL antibody may be required due to differences in protocols and secondary/substrate sensitivity.

#### **Immunogen**

The amino acids surrounding phosphorylated threonine 17 from the human protein were used as the immunogen for the Phospho-PBL antibody.

#### **Storage**

Aliquot the Phospho-PBL antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.