
phospholamban Rabbit pAb

Catalog Number: bs-4197R

Target Protein: phospholamban

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Pig, Cow)

Predicted MW: 5.7 kDa

Subcellular: Cell membrane ,Cytoplasm

Locations:

Entrez Gene: 5350

Swiss Prot: P26678

Source: KLH conjugated synthetic peptide derived from human phospholamban: 1-35/52.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The Sarco(endo)plasmic-reticulum (SER) regulatory protein, Phospholamban (PLB), is a small, plasma membrane-associated phospho-protein found in the SER of cardiac, smooth and slow-twitch muscle. Believed to assemble into a pentamer, PLB regulates cardiac contractility and Ca²⁺ affinity for cardiac SER Ca²⁺ ATPase (SERCA2a). Non-phosphorylated PLB associates with SERCA2a, and inhibits Ca²⁺ reuptake into the SER. PLB activation occurs when key Serine/Threonine residues in PLB (Ser-10, Ser-16, Thr-17) are phosphorylated by numerous effectors, which include PKC, PKA, PKG, and CaM kinase. Phosphorylation of PLB causes dissociation from SERCA2a and a subsequent increase in the rate of Ca²⁺ reuptake into the SER, which accelerates ventricular relaxation.

PRODUCT SPECIFIC PUBLICATIONS

[IF=2.7] Qingjing Gao. et al. Seasonal changes in endoplasmic reticulum stress and steroidogenesis in the ovary of the wild ground squirrels (Citellus dauricus Brandt). GEN COMP ENDOCR. 2023 Nov;343:114368 Other ; . 37604348