

---

## phospho-PLB (Thr17) Rabbit pAb

Catalog Number: bs-7483R

Target Protein: phospho-PLB (Thr17)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Rabbit, Pig, Sheep, Cow, Dog, Horse)

Predicted MW: 6 kDa

Entrez Gene: 5350

Swiss Prot: P26678

Source: KLH conjugated Synthesised phosphopeptide derived from human PLB around the phosphorylation site of Thr17: AS(p-T)IE.

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 Ca<sup>2+</sup> affinity for cardiac SER Ca<sup>2+</sup> ATPase (SERCA2a). Non-phosphorylated PLB associates with SERCA2a, and inhibits Ca<sup>2+</sup> 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 Ca<sup>2+</sup> reuptake into the SER, which accelerates ventricular relaxation.