
MYLK3 Antibody Blocking Peptide

Catalog Number: bs-9865P

Activity: Not tested

Purification: HPLC

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

Background: The Ca²⁺/calmodulin-dependent protein kinases (CaM kinases) are a structurally related subfamily of serine/threonine kinases that includes CaMKI, CaMKII, CaMKIV and Myosin light chain kinases (MYLKs, also designated MLCKs). The MYLK kinases phosphorylate Myosin regulatory light chains to catalyze Myosin interaction with Actin filaments, resulting in contractile activity. MYLK3 (Myosin light chain kinase 3) is a 795 amino acid cardiac-specific protein that contains one protein kinase domain and belongs to the protein kinase superfamily. Like other MYLK kinases, MYLK3 is thought to play a role in smooth muscle contraction, specifically using magnesium as a cofactor to catalyze the ATP-dependent phosphorylation of Myosin light chain proteins. Additionally, MYLK3 may regulate sarcomere assembly in heart tissue, possibly mediating proper heart function.