

Datasheet for ABIN7074736

anti-MYLK3 antibody**2** Images[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	MYLK3
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MYLK3 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant protein corresponding to Mouse MYLK3/MLCK
Cross-Reactivity:	Rat
Purification:	Affinity purification

Target Details

Target:	MYLK3
Alternative Name:	MYLK3/MLCK (MYLK3 Products)
Background:	The Ca ²⁺ /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

Target Details

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.

Gene ID: 213435

NCBI Accession: [NP_001284541](#)

UniProt: [Q3UIZ8](#)

Pathways: [Regulation of Muscle Cell Differentiation](#)

Application Details

Application Notes: IHC/IF (M,R) 1:600-1:1200

Restrictions: For Research Use only

Handling

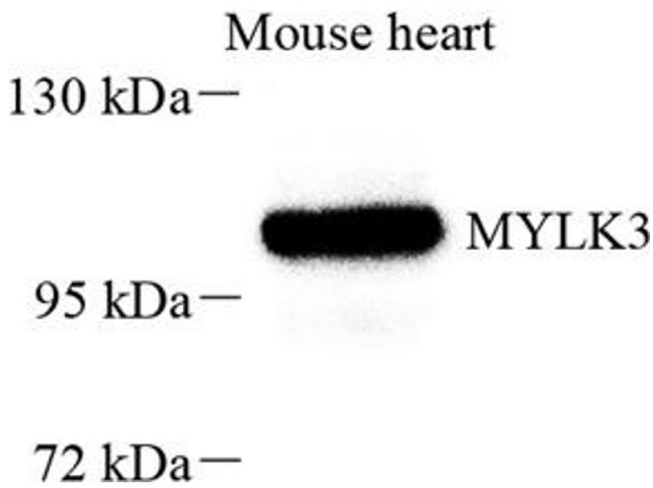
Format: Liquid

Buffer: PBS, pH 7.4, 0.02 % sodium azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C



Western Blotting

Image 1. Western blot analysis of MYLK3 (ABIN7074736) at dilution of 1: 800



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Immunohistochemistry analysis of paraffin-embedded mouse heart using MYLK3 (ABIN7074736) at dilution of 1: 1200