# abcam

# Product datasheet

# Recombinant human MYLK2 protein ab84800

# 5 Images

**Description** 

Product name Recombinant human MYLK2 protein

**Biological activity** Specific activity: 270nmol/min/mg.

**Purity** > 75 % Densitometry.

Affinity purified.

Expression system Baculovirus infected Sf9 cells

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Tags His tag N-Terminus

## **Specifications**

Our Abpromise guarantee covers the use of ab84800 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Western blot

**Functional Studies** 

Form Liquid

Additional notes ab60014 (Mouse MYL9 full length protein) can be utilized as a substrate for assessing Kinase

activity

# **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.00

Preservative: 1.02% Imidazole

Constituents: 0.00174% PMSF, 0.82% Sodium phosphate, 0.00308% DTT, 25% Glycerol

(glycerin, glycerine), 1.74% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

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#### **General Info**

Function Implicated in the level of global muscle contraction and cardiac function. Phosphorylates a

specific serine in the N-terminus of a myosin light chain.

Tissue specificity Heart and skeletal muscles. Increased expression in the apical tissue compared to the

interventricular septal tissue.

Involvement in disease Defects in MYLK2 are a cause of familial hypertrophic cardiomyopathy (CMH) [MIM:192600]; also

designated FHC or HCM. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden

cardiac death.

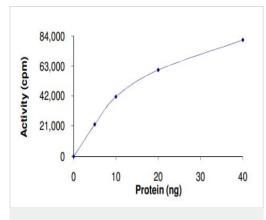
**Sequence similarities**Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.

Contains 1 protein kinase domain.

**Cellular localization** Cytoplasm. Colocalizes with phosphorylated myosin light chain (RLCP) at filaments of the

myofibrils.

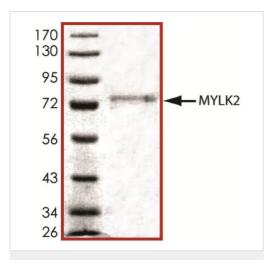
#### **Images**



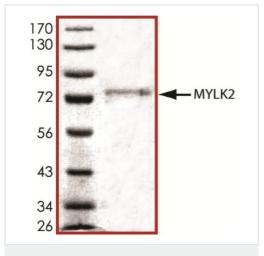
Functional Studies - Recombinant human MYLK2 protein (ab84800)

The specific activity of MYLK2 (ab84800) was determined to be 238 nmol/min/mg as per activity assay protocol

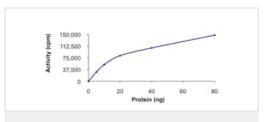




SDS-PAGE - Recombinant human MYLK2 protein (ab84800)



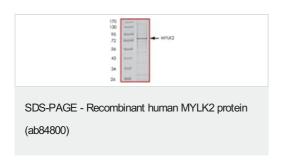
SDS-PAGE - Recombinant human MYLK2 protein (ab84800)



Functional Studies - Recombinant human MYLK2 protein (ab84800)

SDS PAGE analysis of ab84800

Specific activity of ab84800



SDS page analysis of ab84800

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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