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## Datasheet for ABIN1385505 **anti-MYLK3 antibody**

### Overview

|              |                                      |
|--------------|--------------------------------------|
| Quantity:    | 100 µL                               |
| Target:      | MYLK3                                |
| Reactivity:  | Human, Mouse, Rat                    |
| Host:        | Rabbit                               |
| Clonality:   | Polyclonal                           |
| Conjugate:   | This MYLK3 antibody is un-conjugated |
| Application: | Western Blotting (WB)                |

### Product Details

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| Immunogen:        | KLH conjugated synthetic peptide derived from human MYLK3 |
| Isotype:          | IgG                                                       |
| Cross-Reactivity: | Human, Mouse, Rat                                         |
| Purification:     | Purified by Protein A.                                    |

### Target Details

|                   |                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target:           | MYLK3                                                                                                                                                                                                                                                                                                                                   |
| Alternative Name: | MYLK3 ( <a href="#">MYLK3 Products</a> )                                                                                                                                                                                                                                                                                                |
| Background:       | <p>Synonyms: caMLCK, Cardiac MyBP C associated Ca/CaM kinase, Cardiac-MyBP-C-associated Ca/CaM kinase, MLC kinase, MLCK, MLCK2, Mylk3, MYLK3_HUMAN, Myosin light chain kinase 3, Putative myosin light chain kinase 3.</p> <p>Background: The Ca<sup>2+</sup>/calmodulin-dependent protein kinases (CaM kinases) are a structurally</p> |

## Target Details

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.

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

## Application Details

|                    |                       |
|--------------------|-----------------------|
| Application Notes: | WB 1:300-5000         |
| Restrictions:      | For Research Use only |

## Handling

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Format:            | Liquid                                                                                                             |
| Concentration:     | 1 µg/µL                                                                                                            |
| Buffer:            | 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.                                              |
| Preservative:      | ProClin                                                                                                            |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage:           | 4 °C,-20 °C                                                                                                        |
| Storage Comment:   | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.                                    |
| Expiry Date:       | 12 months                                                                                                          |