

# Anti-DAP Kinase 2 Antibody

Catalog # ABO10876

## Product Information

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|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                                        |
| <b>Primary Accession</b> | <a href="#">Q9UIK4</a>                                                                                                    |
| <b>Host</b>              | Rabbit                                                                                                                    |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                                         |
| <b>Clonality</b>         | Polyclonal                                                                                                                |
| <b>Format</b>            | Lyophilized                                                                                                               |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Death-associated protein kinase 2(DAPK2) detection. Tested with WB in Human;Mouse;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                      |

## Additional Information

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| <b>Gene ID</b>                  | 23604                                                                                                                                                                                                                                                                                                                                                             |
| <b>Other Names</b>              | Death-associated protein kinase 2, DAP kinase 2, 2.7.11.1, DAP-kinase-related protein 1, DRP-1, DAPK2                                                                                                                                                                                                                                                             |
| <b>Calculated MW</b>            | 42898                                                                                                                                                                                                                                                                                                                                                             |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse                                                                                                                                                                                                                                                                                                                    |
| <b>Subcellular Localization</b> | Cytoplasm. Cytoplasmic vesicle, autophagosome lumen.                                                                                                                                                                                                                                                                                                              |
| <b>Tissue Specificity</b>       | Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle. It is expressed abundantly in cells differentiated toward granulocytes and low in undifferentiated, normal and leukemic hematopoietic cells and monocytes/macrophages. . |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protein Name</b>             | Death-associated protein kinase 2(DAP kinase 2)                                                                                                                                                                                                                                                                                                                   |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg Na <sub>3</sub> .                                                                                                                                                                                                                                      |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence at the C-terminus of human DAP Kinase 2(289-308aa DNQQAMVRRESVNNLENFRK), different from the related mouse and rat sequences by two amino acids.                                                                                                                                                                   |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                                                                                                                                                                                                      |

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| <b>Cross Reactivity</b>      | No cross reactivity with other proteins                                                                                                                                               |
| <b>Storage</b>               | At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing. |
| <b>Sequence Similarities</b> | Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. DAP kinase subfamily.                                                                                  |

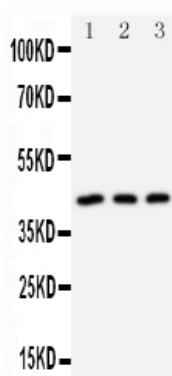
## Protein Information

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|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | DAPK2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Function</b>          | Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell death signals, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Acts as a mediator of anoikis and a suppressor of beta-catenin-dependent anchorage-independent growth of malignant epithelial cells. May play a role in granulocytic maturation (PubMed: <a href="#">17347302</a> ). Regulates granulocytic motility by controlling cell spreading and polarization (PubMed: <a href="#">24163421</a> ). |
| <b>Cellular Location</b> | Cytoplasm. Cytoplasmic vesicle, autophagosome lumen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Tissue Location</b>   | Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Background

Death-associated protein kinase 2 is an enzyme that in humans is encoded by the DAPK2 gene. This gene encodes a protein that belongs to the serine/threonine protein kinase family. This protein contains a N-terminal protein kinase domain followed by a conserved calmodulin-binding domain with significant similarity to that of death-associated protein kinase 1(DAPK1), a positive regulator of programmed cell death. Overexpression of this gene was shown to induce cell apoptosis. It uses multiple polyadenylation sites. The DAPK2 mRNA may undergo alternative splicing to produce a DAPK3-like encoding transcript.

## Images



Anti-DAP Kinase 2 antibody, ABO10876, Western blottingAll lanes: Anti DAP Kinase 2 (ABO10876) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: SMMC Whole Cell Lysate at 40ugPredicted bind size: 43KDObserved bind size: 43KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.