10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Anti-DAP Kinase 2 Antibody

Catalog # ABO10876

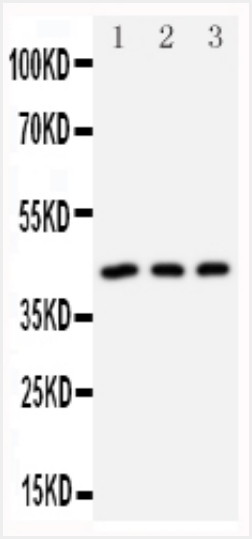
Specification

Anti-DAP Kinase 2 Antibody - Product Information

Application	**WB**
Primary Accession	Q9UIK4
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Death-associated protein kinase 2(DAPK2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.



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

Anti-DAP Kinase 2 Antibody - Additional Information

Gene ID 23604

Other Names
Death-associated protein kinase 2, DAP kinase 2, 2.7.11.1, DAP-kinase-related protein 1, DRP-1, DAPK2

Calculated MW
42898 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cytoplasm. Cytoplasmic vesicle, autophagosome lumen.

Tissue Specificity
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

Anti-DAP Kinase 2 Antibody - 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.

granulocytes and low in undifferentiated, normal and leukemic hematopoietic cells and monocytes/macrophages. .

Protein Name
Death-associated protein kinase 2(DAP kinase 2)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human DAP Kinase 2(289-308aa DNQQAMVRRESVVNLENFRK), different from the related mouse and rat sequences by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**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.**

Sequence Similarities
Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. DAP kinase subfamily.

Anti-DAP Kinase 2 Antibody - Protein Information

Name DAPK2

Function
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:17347302). Regulates granulocytic motility by controlling cell spreading and polarization (PubMed:24163421).

Cellular Location
Cytoplasm. Cytoplasmic vesicle, autophagosome lumen

Tissue Location
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

Anti-DAP Kinase 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture