

Anti-DAP Kinase 2 Antibody

Catalog # ABO10876

Specification

Anti-DAP Kinase 2 Antibody - Product Information

ApplicationWBPrimary AccessionO9UIK4HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Death-associated protein kinase 2(DAPK2) detection. Testedwith WB in Human;Mouse;Rat.Vertice of the second se

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

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 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

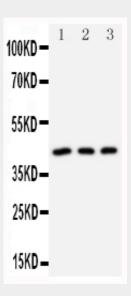
Anti-DAP Kinase 2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• <u>Cell Culture</u> Anti-DAP Kinase 2 Antibody - 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

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.