

**DAPK2 Antibody**  
Catalog # ASC10117

**Specification**

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**DAPK2 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q9UIK4</a>
Other Accession	<a href="#">BAA88063</a> , <a href="#">6521210</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	42 kDa KDa
Application Notes	DAPK2 antibody can be used for detection of DAPK2 by Western blot at 1 µg/mL. An approximately 42 kDa band can be detected. DAPK2 has no cross responses to DAPK1. Antibody can also be used for immunohistochemistry starting at 2 µg/mL.

**DAPK2 Antibody - Additional Information**

Gene ID **23604**

**Other Names**

DAPK2 Antibody: DRP1, DRP-1, Death-associated protein kinase 2, DAP-kinase-related protein 1, DAP kinase 2, death-associated protein kinase 2

**Target/Specificity**

DAPK2; DAPK2 has no cross responses to DAPK1.

**Reconstitution & Storage**

DAPK2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

DAPK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**DAPK2 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:<a href="http://www.uniprot.org/citations/17347302" target="\_blank">17347302</a>). Regulates granulocytic motility by controlling cell spreading and polarization (PubMed:<a href="http://www.uniprot.org/citations/24163421" target="\_blank">24163421</a>).

#### Cellular Location

Cytoplasm. Cytoplasmic vesicle, autophagosome lumen

#### Tissue Location

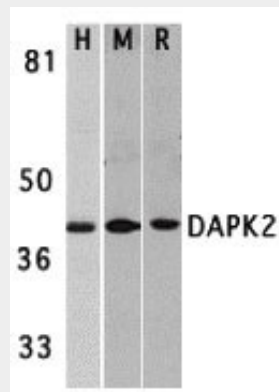
Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle

### DAPK2 Antibody - Protocols

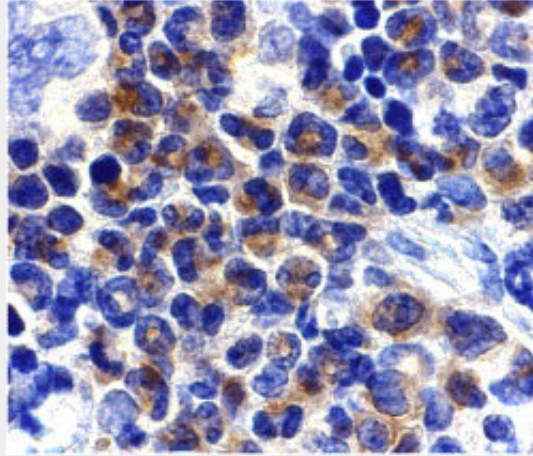
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### DAPK2 Antibody - Images



Western blot analysis of DAPK2 in A431 (H), mouse spleen (M), and rat kidney (R) lysates with DAPK2 antibody at 1 µg/mL.



Immunohistochemistry of DAPK2 in mouse spleen cells with DAPK2 antibody at 2 µg/mL.

### **DAPK2 Antibody - Background**

DAPK2 Antibody: Apoptosis is mediated by death domain containing adapter molecules and a caspase family of proteases. Certain serine/threonine protein kinases, such as RIP and DAP kinase, are mediators of apoptosis. DAP kinase (DAPK) is pro-apoptotic calcium-regulated serine/threonine kinase containing death domain. Ectopic expression of DAPK induces cell death and suppresses oncogenic transformation. DAPK mediates IFN $\gamma$  induced apoptosis. A novel DAP kinase-related protein was recently identified and designated DAPK2 and DRP-1. Ectopically expressed DAPK2 induced apoptosis in various types of cells. DAPK has high sequence homology to ZIP kinase and DRAK1/2, and they represent a novel family of serine/threonine kinases, which mediates apoptosis through their catalytic activities. The messenger RNA of DAPK2 is expressed in multiple human tissues.

### **DAPK2 Antibody - References**

Kawai T, Nomura F, Hoshino K, Copeland NG, Gilbert DJ, Jenkins NA, Akira S. Death-associated protein kinase 2 is a new calcium/calmodulin-dependent protein kinase that signals apoptosis through its catalytic activity. *Oncogene* 1999;18(23):3471-80  
Inbal B, Shani G, Cohen O, Kissil JL, Kimchi A. Death-associated protein kinase-related protein 1, a novel serine/threonine kinase involved in apoptosis. *Mol Cell Biol* 2000;20(3):1044-54 (WD0101)