

### DAPK2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7218A

### Specification

# DAPK2 Antibody (N-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	<u>O9UIK4</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42898
Antigen Region	40-70
Antigen Region	40-70

## DAPK2 Antibody (N-term) - Additional Information

Gene ID 23604

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

**Target/Specificity** This DAPK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 40-70 amino acids from the N-terminal region of human DAPK2.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

DAPK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# DAPK2 Antibody (N-term) - 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:<u>17347302</u>). Regulates granulocytic motility by controlling cell spreading and polarization (PubMed:<u>24163421</u>).

#### **Cellular Location**

Cytoplasm. Cytoplasmic vesicle, autophagosome lumen

#### **Tissue Location**

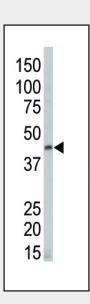
Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle

## DAPK2 Antibody (N-term) - Protocols

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

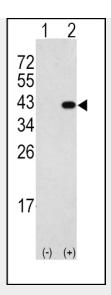
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# DAPK2 Antibody (N-term) - Images

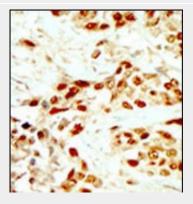


The anti-DAPK2 Pab (Cat. #AP7218a) is used in Western blot to detect DAPK2 in mouse lung tissue lysate.

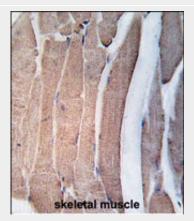




Western blot analysis of DAPK2(arrow) using rabbit polyclonal DAPK2 Antibody (N-term) (Cat. #AP7218a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DAPK2 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with DAPK2 Antibody (N-term V55) (Cat.#AP7218a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

DAPK2 Antibody (N-term) - Background



DAPK2 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.

## DAPK2 Antibody (N-term) - References

Satoh, A., et al., Br. J. Cancer 86(11):1817-1823 (2002). Chan, M.W., et al., Clin. Cancer Res. 8(2):464-470 (2002). Wong, T.S., et al., Clin. Cancer Res. 8(2):433-437 (2002). Shani, G., et al., EMBO J. 20(5):1099-1113 (2001). Inbal, B., et al., Mol. Cell. Biol. 20(3):1044-1054 (2000).