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# DAPK2 Antibody (N-term)

**Purified Rabbit Polyclonal Antibody (Pab)**

**Catalog # AP7033a**

## Specification

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

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q9UIK4 |
| Reactivity | **Human, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **1-30** |

### 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 1-30 amino acids from the N-terminal region of human DAPK2.

**Dilution**
WB~~1:2000
IHC-P~~1:50~100

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

**Cellular Location**
Cytoplasm. Cytoplasmic vesicle, autophagosome lumen

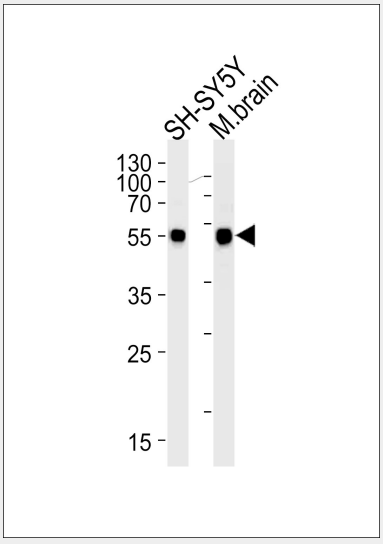
**Tissue Location**
Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle

## DAPK2 Antibody (N-term) - Protocols

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

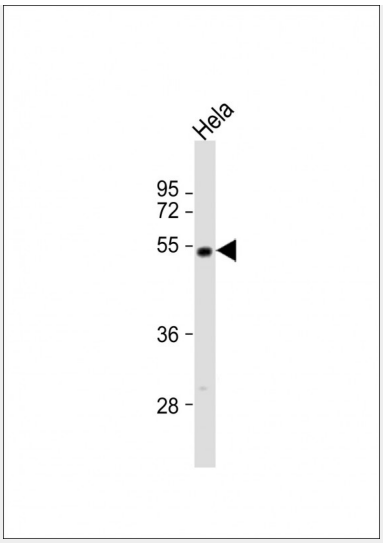
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## DAPK2 Antibody (N-term) - Images

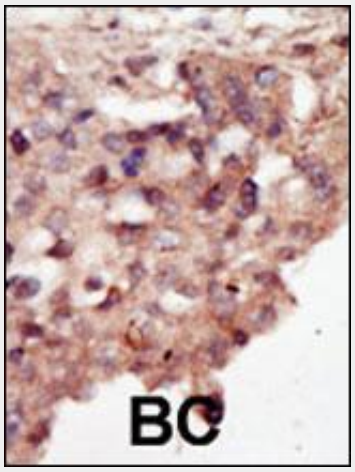



Western blot analysis of lysates from SH-SY5Y cell line and mouse brain tissue lysates (from left to right), using DAPK2 Antibody (M1)(Cat. #AP7033a). AP7033a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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Anti-DAPK2 Antibody (M1)at 1:2000 dilution + Hela whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




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.

**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).

**DAPK2 Antibody (N-term) - Citations**

- Oncogenic miR-17/20a Forms a Positive Feed-forward Loop with the p53 Kinase DAPK3 to Promote Tumorigenesis.
- Lyn kinase promotes erythroblast expansion and late-stage development.