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DAPK2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7033a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9UIK4
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42898
Antigen Region	1-30

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	IHC-P~~1:100~500 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.

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

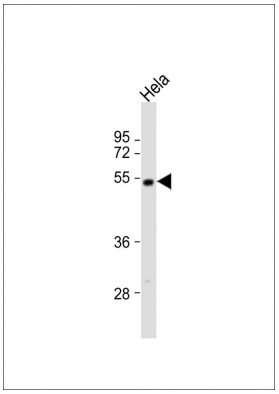
Background

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.

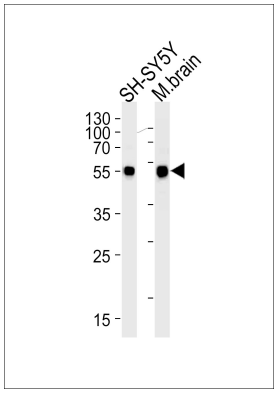
References

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).

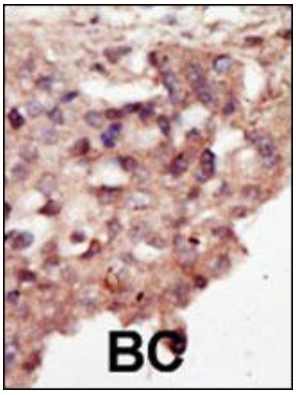
Images



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.



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.



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.

Citations

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

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