

Product Name: hDAPK1-T1316 Mouse Monoclonal Antibody
Catalog #: AMM86130

Summary

Production Name	hDAPK1-T1316 Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB
Reactivity	Human, Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Immunogen

Gene Name	hDAPK1-T1316
Alternative Names	Death-associated protein kinase 1, DAP kinase 1, 2.7.11.1, DAPK1, DAPK
Gene ID	1612.0
SwissProt ID	P53355. This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between amino acids from human.

Application

Dilution Ratio	WB:1:4000
Molecular Weight	160.0kDa

Background

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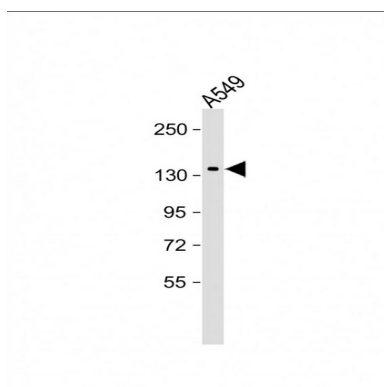


Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell deaths signal, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Phosphorylates PIN1 resulting in inhibition of its catalytic activity, nuclear localization, and cellular function. Phosphorylates TPM1, enhancing stress fiber formation in endothelial cells. Phosphorylates STX1A and significantly decreases its binding to STXBP1. Phosphorylates PRKD1 and regulates JNK signaling by binding and activating PRKD1 under oxidative stress. Phosphorylates BECN1, reducing its interaction with BCL2 and BCL2L1 and promoting the induction of autophagy. Phosphorylates TSC2, disrupting the TSC1-TSC2 complex and stimulating mTORC1 activity in a growth factor-dependent pathway. Phosphorylates RPS6, MYL9 and DAPK3. Acts as a signaling amplifier of NMDA receptors at extrasynaptic sites for mediating brain damage in stroke. Cerebral ischemia recruits DAPK1 into the NMDA receptor complex and it phosphorylates GRINB at Ser-1303 inducing injurious Ca(2+) influx through NMDA receptor channels, resulting in an irreversible neuronal death. Required together with DAPK3 for phosphorylation of RPL13A upon interferon-gamma activation which is causing RPL13A involvement in transcript-selective translation inhibition.

Research Area

Apoptosis

Image Data



Anti-DAPK1 Antibody T1316 at 1:4000 dilution + A549 whole cell lysate

Note

For research use only.