

Mouse Dapk1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16359a

Specification

Mouse Dapk1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q80YE7
Other Accession	P53355 , NP_083929.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	385-412

Mouse Dapk1 Antibody (N-term) - Additional Information

Gene ID 69635

Other Names

Death-associated protein kinase 1, DAP kinase 1, Dapk1

Target/Specificity

This Mouse Dapk1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 385-412 amino acids from the N-terminal region of mouse Dapk1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Mouse Dapk1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Dapk1 Antibody (N-term) - Protein Information

Name Dapk1

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 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 (By similarity). 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.

Tissue Location

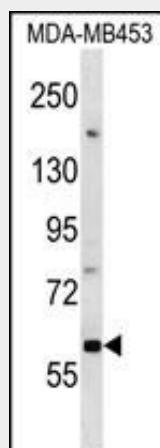
High levels in bladder, uterus, vas deferens, lung, liver and kidney.

Mouse Dapk1 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 Cytometry](#)
- [Cell Culture](#)

Mouse Dapk1 Antibody (N-term) - Images



Mouse Dapk1 Antibody (N-term) (Cat. #AP16359a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the Dapk1 antibody detected the Dapk1 protein (arrow).

Mouse Dapk1 Antibody (N-term) - Background

Calcium/calmodulin-dependent serine/threonine kinase. Isoform 1 is a negative regulator of apoptosis in direct contrast to its human homolog. Isoform 2 has no effect on apoptosis and its

function is unknown.

Mouse Dapk1 Antibody (N-term) - References

Tu, W., et al. Cell 140(2):222-234(2010)
Kang, B.N., et al. J. Neurosci. 30(1):93-98(2010)
Munger, S.C., et al. Genes Dev. 23(21):2521-2536(2009)
Li, L., et al. Int. J. Oncol. 34(4):905-914(2009)
Stevens, C., et al. J. Biol. Chem. 284(1):334-344(2009)