

Mouse Dapk3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14711c**Specification**

Mouse Dapk3 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O54784
Other Accession	O88764 , NP_031854.1 , NP_001177402.1
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51422
Antigen Region	255-282

Mouse Dapk3 Antibody (Center) - Additional Information**Gene ID** 13144**Other Names**

Death-associated protein kinase 3, DAP kinase 3, DAP-like kinase, Dlk, MYPT1 kinase, ZIP-kinase, Dapk3, Zipk

Target/Specificity

This Mouse Dapk3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 255-282 amino acids from the Central region of mouse Dapk3.

Dilution

WB~~1:1000

IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

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 Dapk3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Dapk3 Antibody (Center) - Protein Information

Name Dapk3

Synonyms Zipk

Function Serine/threonine kinase which is involved in the regulation of apoptosis, autophagy, transcription, translation and actin cytoskeleton reorganization. Regulates both type I (caspase-dependent) apoptotic and type II (caspase-independent) autophagic cell deaths signal, depending on the cellular setting. Involved in formation of promyelocytic leukemia protein nuclear body (PML-NB). Involved in apoptosis involving PAWR which mediates cytoplasmic relocation; in vitro phosphorylates PAWR (By similarity). Regulates myosin phosphorylation in both smooth muscle and non-muscle cells. In smooth muscle, regulates myosin either directly by phosphorylating MYL12B and MYL9 or through inhibition of smooth muscle myosin phosphatase (SMPP1M) via phosphorylation of PPP1R12A; the inhibition of SMPP1M functions to enhance muscle responsiveness to Ca(2+) and promote a contractile state. Phosphorylates MYL12B in non-muscle cells leading to reorganization of actin cytoskeleton such as in regulation of cell polarity and cell migration. Positively regulates canonical Wnt/beta- catenin signaling through interaction with NLK and TCF7L2; disrupts the NLK-TCF7L2 complex thereby influencing the phosphorylation of TCF7L2 by NLK. Phosphorylates STAT3 and enhances its transcriptional activity. Enhances transcription from AR-responsive promoters in a hormone- and kinase-dependent manner. Phosphorylates histone H3 on 'Thr-11' at centromeres during mitosis (By similarity). Phosphorylates RPL13A on 'Ser-77' upon interferon-gamma activation which is causing RPL13A release from the ribosome, RPL13A association with the GAIT complex and its subsequent involvement in transcript-selective translation inhibition.

Cellular Location

Nucleus. Nucleus, PML body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:O88764}. Chromosome, centromere {ECO:0000250|UniProtKB:O88764}. Cytoplasm {ECO:0000250|UniProtKB:O88764}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:O43293}. Midbody {ECO:0000250|UniProtKB:O43293} Note=Predominantly localized to the nucleus. Relocates to the cytoplasm on binding PAWR where the complex appears to interact with actin filaments. Associated with the centrosomes throughout the mitotic cell cycle, with the centromeres from prophase to anaphase and with the contractile ring during cytokinesis (By similarity) {ECO:0000250|UniProtKB:O88764}

Tissue Location

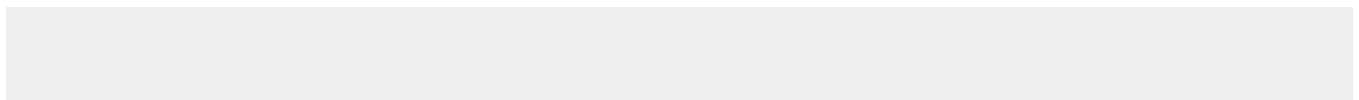
Highly expressed in heart, brain, lung, skeletal muscle, kidney and testis. Lower levels in liver and spleen

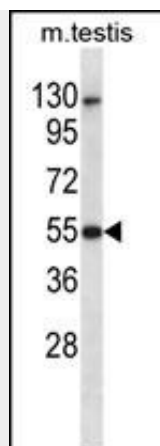
Mouse Dapk3 Antibody (Center) - Protocols

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

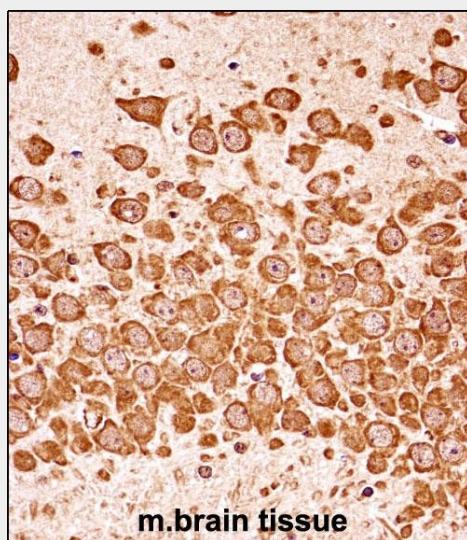
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mouse Dapk3 Antibody (Center) - Images





Mouse Dapk3 Antibody (Center) (Cat. #AP14711c) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the Dapk3 antibody detected the Dapk3 protein (arrow).



Mouse Dapk3 Antibody (Center) (AP14711c) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Dapk3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Dapk3 Antibody (Center) - Background

Serine/threonine kinase which acts as a positive regulator of apoptosis. Phosphorylates histone H3 on 'Thr-11' at centromeres during mitosis. Regulates myosin light chain phosphatase through phosphorylation of MYPT1 thereby regulating the assembly of the actin cytoskeleton, cell migration, invasiveness of tumor cells, smooth muscle contraction and neurite outgrowth. Involved in the formation of promyelocytic leukemia protein nuclear body (PML-NB), one of many subnuclear domains in the eukaryotic cell nucleus, and which is involved in oncogenesis and viral infection (By similarity).

Mouse Dapk3 Antibody (Center) - References

- Chang, A.N., et al. J. Biol. Chem. 285(8):5122-5126(2010)
- Ohbayashi, N., et al. Biochem. Biophys. Res. Commun. 372(4):708-712(2008)
- Wooldridge, A.A., et al. J. Biol. Chem. 283(17):11850-11859(2008)
- Shoval, Y., et al. PLoS Genet. 3(10):1884-1893(2007)
- Sato, N., et al. Int. Immunol. 17(12):1543-1552(2005)