

**DAPK3 / ZIP Kinase Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS11448****Specification**

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**DAPK3 / ZIP Kinase Antibody (Internal) - Product Information**

Application	ICC, IF, WB, IHC
Primary Accession	<a href="#">O43293</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53kDa KDa

**DAPK3 / ZIP Kinase Antibody (Internal) - Additional Information****Gene ID** 1613**Other Names**

Death-associated protein kinase 3, DAP kinase 3, 2.7.11.1, DAP-like kinase, Dlk, MYPT1 kinase, Zipper-interacting protein kinase, ZIP-kinase, DAPK3, ZIPK

**Target/Specificity**

peptide corresponding to amino acids near the center of human ZIP kinase

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions**

DAPK3 / ZIP Kinase Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**DAPK3 / ZIP Kinase Antibody (Internal) - 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. Involved in the regulation of smooth muscle contraction. Regulates both type I (caspase-dependent) apoptotic and type II (caspase-independent) autophagic cell deaths signal, depending on the cellular setting. Involved in regulation of starvation-induced autophagy. 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. Isoform 2 can phosphorylate myosin,

PPP1R12A and MYL12B. Overexpression leads to condensation of actin stress fibers into thick bundles. Involved in actin filament focal adhesion dynamics. The function in both reorganization of actin cytoskeleton and focal adhesion dissolution is modulated by RhoD. Positively regulates canonical Wnt/beta-catenin signaling through interaction with NLK and TCF7L2. 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. Enhances transcription from AR-responsive promoters in a hormone- and kinase- dependent manner. Involved in regulation of cell cycle progression and cell proliferation. May be a tumor suppressor.

#### Cellular Location

Nucleus. Cytoplasm Note=Predominantly localizes to the cytoplasm but can shuttle between the nucleus and cytoplasm; cytoplasmic localization is promoted by phosphorylation at Thr-299 and involves Rho/Rock signaling [Isoform 2]: Nucleus. Cytoplasm

#### Tissue Location

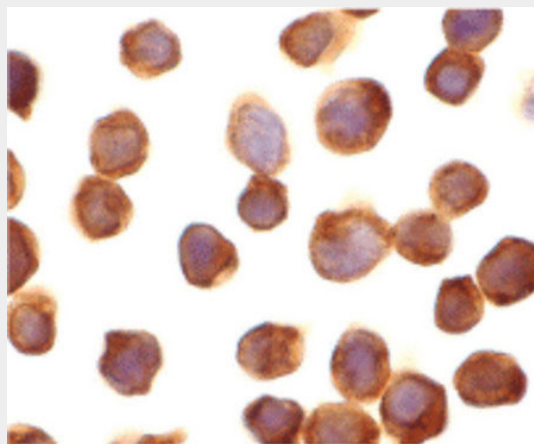
Widely expressed. Isoform 1 and isoform 2 are expressed in the bladder smooth muscle.

### DAPK3 / ZIP Kinase Antibody (Internal) - Protocols

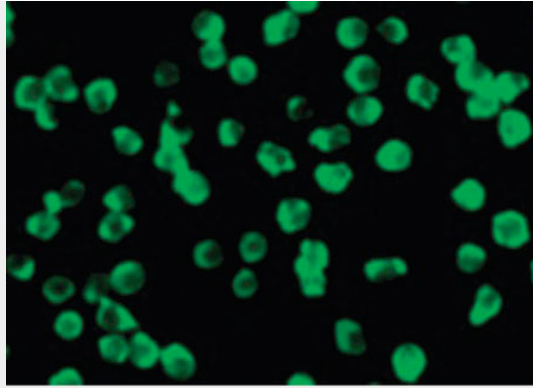
Provided below are standard protocols that you may find useful for product applications.

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

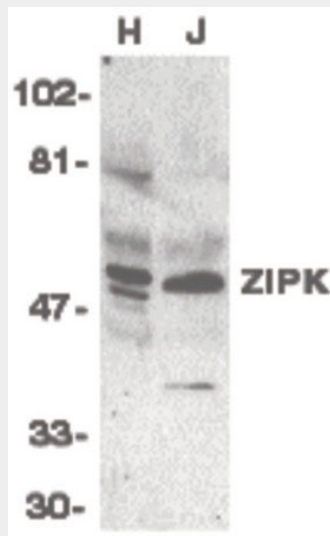
### DAPK3 / ZIP Kinase Antibody (Internal) - Images



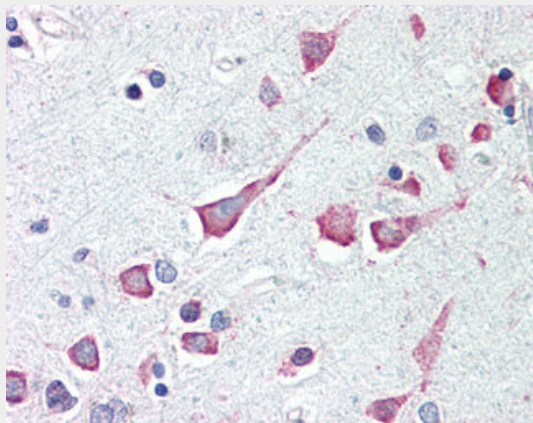
Immunocytochemistry of ZIP kinase in Jurkat cells with ZIP kinase antibody at 10 ug/ml.



Immunofluorescence of ZIPK in Jurkat cells with ZIPK antibody at 10 ug/ml.



Western blot of ZIP kinase in HeLa (H) and Jurkat (J) whole cell lysates with ZIP kinase...



Anti-DAPK3 antibody IHC of human brain, cortex.

#### **DAPK3 / ZIP Kinase Antibody (Internal) - Background**

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### **DAPK3 / ZIP Kinase Antibody (Internal) - References**

- Kawai T., et al. Mol. Cell. Biol. 18:1642-1651(1998).  
Murata-Hori M., et al. FEBS Lett. 451:81-84(1999).  
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Takamoto N., et al. Arch. Biochem. Biophys. 456:194-203(2006).  
Niuro N., et al. J. Biol. Chem. 276:29567-29574(2001).