

Anti-DAP Kinase 3 Antibody
Rabbit polyclonal antibody to DAP Kinase 3
Catalog # AP61290**Specification**

Anti-DAP Kinase 3 Antibody - Product Information

Application	WB
Primary Accession	O43293
Other Accession	O54784
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52536

Anti-DAP Kinase 3 Antibody - Additional Information**Gene ID** 1613**Other Names**

ZIPK; Death-associated protein kinase 3; DAP kinase 3; DAP-like kinase; Dlk; MYPT1 kinase; Zipper-interacting protein kinase; ZIP-kinase

Target/Specificity

Recognizes endogenous levels of DAP Kinase 3 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-DAP Kinase 3 Antibody - 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. Nucleus, PML body {ECO:0000250|UniProtKB:O54784}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:O54784}. Chromosome, centromere. Cytoplasm. Cytoplasm, cytoskeleton, spindle. Midbody 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

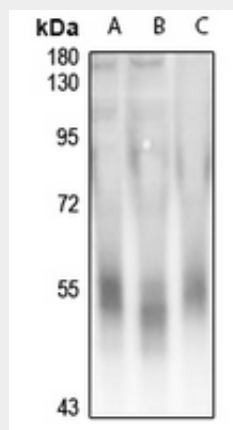
Widely expressed. Isoform 1 and isoform 2 are expressed in the bladder smooth muscle.

Anti-DAP Kinase 3 Antibody - Protocols

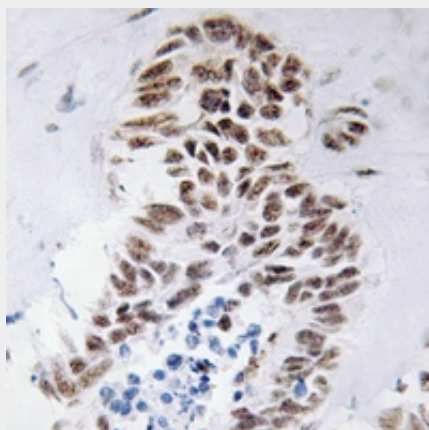
Provided below are standard protocols that you may find useful for product applications.

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

Anti-DAP Kinase 3 Antibody - Images



Western blot analysis of DAP Kinase 3 expression in A549 (A), MCF7 (B), mouse embryo (C) whole cell lysates.



Immunohistochemical analysis of DAP Kinase 3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-DAP Kinase 3 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DAP Kinase 3. The exact sequence is proprietary.