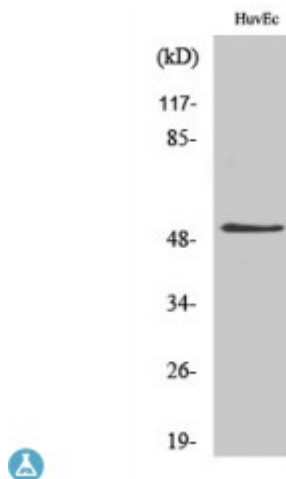


Anti-DAPK3 antibody



Description

DAPK3 is a protein encoded by the DAPK3 gene which is approximately 52,5 kDa. DAPK3 is localised to the nucleus and cytoplasm. It is involved in CDK-mediated phosphorylation and removal of Cdc6, dimerization of procaspase and pathways in cancer. It is a serine/threonine kinase which is involved in the regulation of apoptosis, autophagy, transcription, translation and actin cytoskeleton reorganization. It also plays a role in the regulation of smooth muscle contraction. DAPK3 is widely expressed in human tissues including the smooth muscle of the bladder. STJ92654 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of DAPK3 protein.

Model	STJ92654
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human DAPK3 around the non-phosphorylation site of T265.
Immunogen Region	210-290 aa
Gene ID	1613
Gene Symbol	DAPK3
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
Specificity	DAPK3 Polyclonal Antibody detects endogenous levels of DAPK3 protein.
Tissue Specificity	Widely expressed. Isoform 1 and isoform 2 are expressed in the bladder

smooth muscle.

Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Death-associated protein kinase 3 DAP kinase 3 DAP-like kinase Dlk MYPT1 kinase Zipper-interacting protein kinase ZIP-kinase
Molecular Weight	52 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2676OMIM:603289
Alternative Names	Death-associated protein kinase 3 DAP kinase 3 DAP-like kinase Dlk MYPT1 kinase Zipper-interacting protein kinase ZIP-kinase
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 Localization	Nucleus Cytoplasm. 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 1: Nucleus Cytoplasm Isoform 2: Nucleus Cytoplasm
Post-translational	The phosphorylation status is critical for kinase activity, oligomerization and

Modifications

intracellular localization. Phosphorylation at Thr-180, Thr-225 and Thr-265 is essential for activity. The phosphorylated form is localized in the cytoplasm promoted by phosphorylation at Thr-299; nuclear translocation or retention is maximal when it is not phosphorylated. Phosphorylation increases the trimeric form, and its dephosphorylation favors a kinase-inactive monomeric form. Both isoform 1 and isoform 2 can undergo autophosphorylation.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W <http://www.stjohnslabs.com/>

E info@stjohnslabs.com