

DAPK2 (P-24): sc-130734

BACKGROUND

Death-associated protein kinase 2 (DAPK2), also designated death-associated protein kinase-related protein-1 (DRP-1), is a calcium/calmodulin-regulated serine/threonine kinase that binds to calmodulin, undergoes autophosphorylation in response to an increase in cellular calcium concentration, and phosphorylated myosin light chain (MLC) as an exogenous substrate. DAPK2 is expressed in heart, lung, and skeletal muscle and is localized to the cytoplasm. DAPK2 displays significant homology to DAP-kinase, which mediates interferon (IFN)- γ -induced apoptosis in HeLa. Subsequently, DAPK2 is thought to function as a possible tumor suppressor gene.

REFERENCES

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2. Sakagami, H., et al. 1997. Molecular cloning and developmental expression of a rat homologue of death-associated protein kinase in the nervous system. *Brain Res. Mol. Brain Res.* 52: 249-256.
3. Inbal, B., et al. 1997. DAP kinase links the control of apoptosis to metastasis. *Nature* 390: 180-184.
4. Kawai, T., et al. 1998. ZIP kinase, a novel serine/threonine kinase which mediates apoptosis. *Mol. Cell. Biol.* 18: 1642-1651.
5. Schumacher, A.M., et al. 2002. DAPK catalytic activity in the hippocampus increases during the recovery phase in an animal model of brain hypoxic-ischemic injury. *Biochim. Biophys. Acta* 1600: 128-137.
6. Jin, Y., et al. 2002. A death-associated protein kinase (DAPK)-interacting protein, DIP-1, is an E3 ubiquitin ligase that promotes tumor necrosis factor-induced apoptosis and regulates the cellular levels of DAPK. *J. Biol. Chem.* 277: 46980-46986.
7. Kim, W.S., et al. 2003. Promoter methylation and down-regulation of DAPK is associated with gastric atrophy. *Int. J. Mol. Med.* 12: 827-830.

CHROMOSOMAL LOCATION

Genetic locus: DAPK2 (human) mapping to 15q22.31; Dapk2 (mouse) mapping to 9 C.

SOURCE

DAPK2 (P-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of DAPK2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

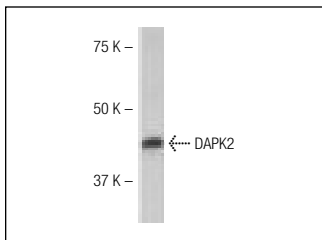
DAPK2 (P-24) is recommended for detection of DAPK2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DAPK2 siRNA (h): sc-38978, DAPK2 siRNA (m): sc-38979, DAPK2 shRNA Plasmid (h): sc-38978-SH, DAPK2 shRNA Plasmid (m): sc-38979-SH, DAPK2 shRNA (h) Lentiviral Particles: sc-38978-V and DAPK2 shRNA (m) Lentiviral Particles: sc-38979-V.

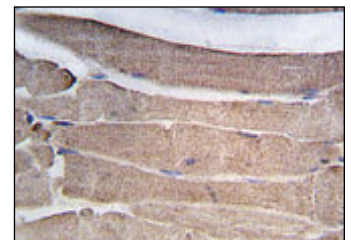
Molecular Weight of DAPK2: 42 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or mouse lung extract: sc-2390.

DATA



DAPK2 (P-24): sc-130734. Western blot analysis of DAPK2 expression in mouse lung tissue extract.



DAPK2 (P-24): sc-130734. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DAPK2 (X15): sc-100371**, our highly recommended monoclonal alternative to DAPK2 (P-24).