

Clik1 (L-24): sc-130724

BACKGROUND

Clik1 (CLP36 interacting kinase), also known as STK35 (serine/threonine-protein kinase 35) or PDIK1 (PDLIM1-interacting kinase 1), is a 401 amino acid protein that belongs to the protein kinase superfamily. Localized predominately to the nucleus, Clik1 is expressed in the liver, kidney, pancreas, spleen, thymus, prostate and testis. However, coexpression with CLP36 causes relocalization of nuclear Clik1 to the cytoplasm and into Actin stress fibers. Actin stress fibers form a dynamic organelle that is important in processes involving cell shape, such as cell migration, cell polarity and cytokinesis. It is suggested that Clik1 may be a novel regulator of the actomyosin cytoskeleton in nonmuscle cells.

REFERENCES

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2. Vallenius, T., Luukko, K. and Mäkelä, T.P. 2000. CLP36 PDZ-LIM protein associates with nonmuscle alpha-actinin-1 and α -actinin-4. *J. Biol. Chem.* 275: 11100-11105.
3. Vallenius, T. and Mäkelä, T.P. 2002. Clik1: a novel kinase targeted to Actin stress fibers by the CLP36 PDZ-LIM protein. *J. Cell Sci.* 115: 2067-2073.
4. Khurana, T., Khurana, B. and Noegel, A.A. 2002. LIM proteins: association with the Actin cytoskeleton. *Protoplasma* 219: 1-12.
5. Guo, L., Ji, C., Gu, S., Ying, K., Cheng, H., Ni, X., Liu, J., Xie, Y. and Mao, Y. 2003. Molecular cloning and characterization of a novel human kinase gene, PDIK1L. *J. Genet.* 82: 27-32.
6. Vallenius, T., Scharm, B., Vesikansa, A., Luukko, K., Schäfer, R. and Mäkelä, T.P. 2004. The PDZ-LIM protein RIL modulates Actin stress fiber turnover and enhances the association of α -actinin with F-Actin. *Exp. Cell Res.* 293: 117-128.
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CHROMOSOMAL LOCATION

Genetic locus: STK35 (human) mapping to 20p13; Stk35 (mouse) mapping to 2 F1.

SOURCE

Clik1 (L-24) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Clik1 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.

RESEARCH USE

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

APPLICATIONS

Clik1 (L-24) is recommended for detection of Clik1 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).

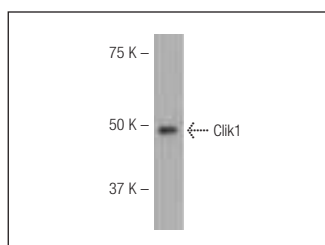
Suitable for use as control antibody for Clik1 siRNA (h): sc-72921, Clik1 siRNA (m): sc-72922, Clik1 shRNA Plasmid (h): sc-72921-SH, Clik1 shRNA Plasmid (m): sc-72922-SH, Clik1 shRNA (h) Lentiviral Particles: sc-72921-V and Clik1 shRNA (m) Lentiviral Particles: sc-72922-V.

Molecular Weight of Clik1: 45 kDa.

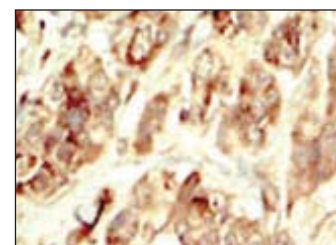
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Clik1 (L-24): sc-130724. Western blot analysis of Clik1 expression in mouse kidney tissue extract.



Clik1 (L-24): sc-130724. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization.

STORAGE

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

PROTOCOLS

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