

LIMK-2 (C-19): sc-8389

BACKGROUND

Proteins containing LIM motifs are typically involved in cell fate determination and growth control. A family of proteins designated LIM kinases, including LIMK-1 and LIMK-2, has been identified. LIMK-1 has been shown to regulate the stabilization of F-Actin structures and Cofilin activity, indicating that LIMK-1 plays a role in a signaling pathway involved in the regulation of cell motility and morphogenesis. LIMK-1 inhibits neuronal differentiation of PC12 cells, and is thought to act by interfering with events downstream of MAPK activation. Expression patterns of LIMK-1 and LIMK-2 suggest that these proteins may have different functions during development. A truncated form of LIMK-2 has been identified in adult testis that is thought to arise from an alternative initiation exon.

REFERENCES

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- Nunoue, K., et al. 1995. LIMK-1 and LIMK-2, two members of a LIM motif-containing protein kinase family. *Oncogene* 11: 701-710.
- Higuchi, O., et al. 1997. Inhibition of activated Ras-induced neuronal differentiation of PC12 cells by the LIM domain of LIM-kinase 1. *Oncogene* 14: 1819-1825.
- Mori, T., et al. 1997. Comparison of tissue distribution of two novel serine/threonine kinase genes containing the LIM motif (LIMK-1 and LIMK-2) in the developing rat. *Brain Res. Mol. Brain Res.* 45: 247-254.
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CHROMOSOMAL LOCATION

Genetic locus: LIMK2 (human) mapping to 22q12.2; Limk2 (mouse) mapping to 11 A1.

SOURCE

LIMK-2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LIMK-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8389 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

LIMK-2 (C-19) is recommended for detection of LIMK-2 of human origin and LIMK-2A and LIMK-2B of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

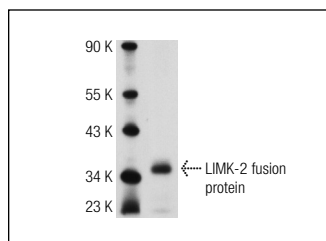
LIMK-2 (C-19) is also recommended for detection of LIMK-2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for LIMK-2 siRNA (h): sc-35812, LIMK-2 siRNA (m): sc-35813, LIMK-2 shRNA Plasmid (h): sc-35812-SH, LIMK-2 shRNA Plasmid (m): sc-35813-SH, LIMK-2 shRNA (h) Lentiviral Particles: sc-35812-V and LIMK-2 shRNA (m) Lentiviral Particles: sc-35813-V.

Molecular Weight of LIMK-2: 65 kDa.

Positive Controls: mouse placenta extract: sc-364247.

DATA



LIMK-2 (C-19): sc-8389. Western blot analysis of human recombinant LIMK-2 fusion protein.

SELECT PRODUCT CITATIONS

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- Garate, M., et al. 2007. Phosphorylation of the tumor suppressor p33^{ING1b} at Ser-126 influences its protein stability and proliferation of melanoma cells. *FASEB J.* 21: 3705-3716.
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- Matsumoto, N., et al. 2010. Pivotal role of actin depolymerization in the regulation of cochlear outer hair cell motility. *Biophys. J.* 99: 2067-2076.
- Peris, B., et al. 2012. Neuronal polarization is impaired in mice lacking RhoE expression. *J. Neurochem.* 121: 903-914.

RESEARCH USE

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