

FILIP (C-13): sc-138789

BACKGROUND

Development of the cortex (cortico-genesis) is a highly complex and dynamic process, involving cellular migration to form the six layers of pyramidal neurons and interneurons. Migrating cells first extend a leading process, then the nucleus moves into the leading process and finally the cell retracts its trailing process. FILIP (Filamin-A-interacting protein 1) is a 1,213 amino acid protein that is likely involved in the Filamin A-mediated events of cellular migration. Filamin A is an Actin-binding protein required for cell motility and interaction with FILIP induces degradation of filamen A. FILIP acts through a Filamin A-F-Actin axis to control the start of neocortical cell migration from the ventricular zone. Overexpression of FILIP in ventricular zone cells results in failure to migrate in explants. There are three isoforms of FILIP that are produced as a result of alternative splicing events.

REFERENCES

1. Nagano, T., et al. 2002. Filamin A-interacting protein (FILIP) regulates cortical cell migration out of the ventricular zone. *Nat. Cell Biol.* 4: 495-501.
2. Nadarajah, B., et al. 2002. Ventricle-directed migration in the developing cerebral cortex. *Nat. Neurosci.* 5: 218-224.
3. Nadarajah, B., et al. 2003. Neuronal migration in the developing cerebral cortex: observations based on real-time imaging. *Cereb. Cortex* 13: 607-611.
4. Feng, Y. and Walsh, C.A. 2004. The many faces of filamin: a versatile molecular scaffold for cell motility and signalling. *Nat. Cell Biol.* 6: 1034-1038.
5. Sato, M. 2004. A novel mechanism that regulates the start of cortical cell migration out of the ventricular zone. *Tanpakushitsu Kakusan Koso* 49: 36-43.
6. Sato, M. and Nagano, T. 2005. Involvement of filamin A and filamin A-interacting protein (FILIP) in controlling the start and cell shape of radially migrating cortical neurons. *Anat. Sci. Int.* 80: 19-29.
7. Robertson, S.P. 2005. Filamin A: phenotypic diversity. *Curr. Opin. Genet. Dev.* 15: 301-307.
8. Kwon, M., et al. 2008. Functional characterization of filamin a interacting protein 1-like, a novel candidate for antivasular cancer therapy. *Cancer Res.* 68: 7332-7341.
9. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 607307. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: FILIP1 (human) mapping to 6q14.1; Filip1 (mouse) mapping to 9 E1.

SOURCE

FILIP (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FILIP 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-138789 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FILIP (C-13) is recommended for detection of FILIP of mouse, rat and human 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).

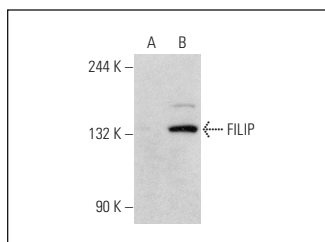
FILIP (C-13) is also recommended for detection of FILIP in additional species, including porcine.

Suitable for use as control antibody for FILIP siRNA (h): sc-95469, Filip1 siRNA (m): sc-145184, FILIP shRNA Plasmid (h): sc-95469-SH, Filip1 shRNA Plasmid (m): sc-145184-SH, FILIP shRNA (h) Lentiviral Particles: sc-95469-V and Filip1 shRNA (m) Lentiviral Particles: sc-145184-V.

Molecular Weight of FILIP: 138 kDa.

Positive Controls: FILIP (h2): 293T Lysate: sc-128621.

DATA



FILIP (C-13): sc-138789. Western blot analysis of FILIP expression in non-transfected: sc-117752 (A) and human FILIP transfected: sc-128621 (B) 293T whole cell lysates.

STORAGE

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

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.