## BACKGROUND

Lamellipodin, also called ras-associated and pleckstrin homology domainscontaining protein 1 (RAPH1), is a 1,302 amino acid member of the MRL family. The peripheral membrane protein mediates localized membrane signals and colocalizes at the tips of filopodia and lamellipodia with ENAH/VASP. Aside from the main isoform, nine additional isoforms have been identified for Lamellipodin (RMO1, RM01a, RM01b, RM01c, RM01ab, RM01ac, RM01bc, RM01abc and RM01-RAPH1). RM01-RAPH1 is expressed in a wide variety of tissues, most highly in brain, heart, ovary and developing embryo. RM01 is also widely expressed, with highest amounts in liver. Lamellipodin is down regulated in breast and ovarian cancers and shows reduced expression in metastatic osteosarcomas in comparison to primary osteosarcoma tumors.

## CHROMOSOMAL LOCATION

Genetic locus: RAPH1 (human) mapping to 2q33.2; Raph1 (mouse) mapping to 1 C2.

## SOURCE

Lamellipodin (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lamellipodin of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{~g} \mathrm{IgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-67603 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## RESEARCH USE

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

## APPLICATIONS

Lamellipodin (E-12) is recommended for detection of Lamellipodin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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).

Suitable for use as control antibody for Lamellipodin siRNA (h): sc-62539, Lamellipodin siRNA (m): sc-62540, Lamellipodin shRNA Plasmid (h): sc-62539-SH, Lamellipodin shRNA Plasmid (m): sc-62540-SH, Lamellipodin shRNA (h) Lentiviral Particles: sc-62539-V and Lamellipodin shRNA (m) Lentiviral Particles: sc-62540-V.

Molecular Weight (predicted) of full-length Lamellipodin: 135 kDa .
Molecular Weight (predicted) of Lamellipodin isoforms: $67-73 \mathrm{kDa}$.
Molecular Weight (observed) of Lamellipodin: 80-100 kDa.
Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or Lamellipodin (h): 293T Lysate: sc-171167.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker ${ }^{\mathrm{TM}}$ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



Lamellipodin (E-12): sc-67603. Western blot analysis of Lamellipodin expression in NIH/3T3 whole cell ysate.


Lamellipodin (E-12): sc-67603. Western blot analysis of Lamellipodin expression in non-transfected: sc-117752 (A) and human Lamellipodin transfected: sc-171167 (B) 293T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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.

Try Lamellipodin (H-5): sc-390050 or Lamellipodin
(A-8): sc-377492, our highly recommended monoclonal alternatives to Lamellipodin (E-12).

