## SANTA CRUZ BIOTECHNOLOGY, INC.

# EGFL7 (M-135): sc-66875



BACKGROUND

Epidermal growth factor (EGF) repeat-containing proteins constitute an expanding family of proteins that are involved in several cellular activities, such as blood coagulation, fibrinolysis, cell adhesion and neural and vertebrate development. A human EGF repeat superfamily member that maps to human chromosome X, EGFL6 encodes a predicted signal peptide, suggesting that it is secreted. EGFL6 is expressed in brain and lung tumors and fetal tissues, but is generally absent from normal adult tissues. EGFL7 is a secreted protein that regulates vascular tubulogenesis *in vivo. In vitro*, EGFL7 inhibits platelet-derived growth factor induced smooth muscle cell migration and promotes adhesion of endothelial cells to the substrate. EGFL7 is expressed specifically by endothelial cells of the heart, lung and kidney.

### REFERENCES

- Soncin, F., et al. 2003. VE-statin, an endothelial repressor of smooth muscle cell migration. EMBO J. 22: 5700-5711.
- 2. Fitch, M.J., et al. 2004. EGFL7, a novel epidermal growth factor-domain gene expressed in endothelial cells. Dev. Dyn. 230: 316-324.
- 3. Parker, L.H., et al. 2004. The endothelial-cell-derived secreted factor EGFL7 regulates vascular tube formation. Nature 428: 754-758.
- Campagnolo, L., et al. 2005. EGFL7 is a chemoattractant for endothelial cells and is upregulated in angiogenesis and arterial injury. Am. J. Pathol. 167: 275-284.
- Caetano, B., et al. 2005. Expression and purification of recombinant vascular endothelial-statin. Protein Expr. Purif. 46: 136-142.
- 6. Jiang, W.D., et al. 2006. siRNA inhibits EGFL7 expression in human endothelial cell line HUVEC. Zhonghua Xin Xue Guan Bing Za Zhi 34: 643-646.
- Schmidt, M., et al. EGFL7 regulates the collective migration of endothelial cells by restricting their spatial distribution. Development 134: 2913-2923.

#### CHROMOSOMAL LOCATION

Genetic locus: EGFL7 (human) mapping to 9q34.3; Egfl7 (mouse) mapping to 2 A3.

#### SOURCE

EGFL7 (M-135) is a rabbit polyclonal antibody raised against amino acids 141-275 mapping at the C-terminus of EGFL7 of mouse origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

Store at 4° C, \*\*D0 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

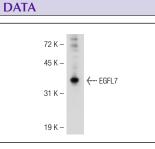
EGFL7 (M-135) is recommended for detection of EGFL7 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting 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 EGFL7 siRNA (h): sc-45471, EGFL7 siRNA (m): sc-45472, EGFL7 shRNA Plasmid (h): sc-45471-SH, EGFL7 shRNA Plasmid (m): sc-45472-SH, EGFL7 shRNA (h) Lentiviral Particles: sc-45471-V and EGFL7 shRNA (m) Lentiviral Particles: sc-45472-V.

Molecular Weight of EGFL7: 30 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.



EGFL7 (M-135): sc-66875. Western blot analysis of EGFL7 expression in ECV304 whole cell lysate.

#### **RESEARCH USE**

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

MONOS Satisfation Guaranteed Try EGFL7 (B-1): sc-373898, our highly recommended monoclonal aternative to EGFL7 (M-135).