

EGFL7 (h): 293 Lysate: sc-113007

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

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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.
4. 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.
5. 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.
7. Schmidt, M., et al. 2006 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.

PRODUCT

EGFL7 (h): 293 Lysate represents a lysate of human EGFL7 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

EGFL7 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive EGFL7 antibodies. Recommended use: 10-20 µl per lane.

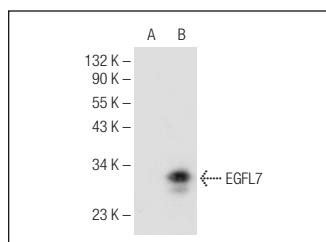
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

EGFL7 (B-1): sc-373898 is recommended as a positive control antibody for Western Blot analysis of enhanced human EGFL7 expression in EGFL7 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



EGFL7 (B-1): sc-373898. Western blot analysis of EGFL7 expression in non-transfected: sc-110760 (A) and human EGFL7 transfected: sc-113007 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.