

Epiregulin (m): 293T Lysate: sc-120077

BACKGROUND

Epiregulin (EPR, EREG), is an epidermal growth factor (EGF)-related growth regulating peptide which exhibits bifunctional properties in the regulation of cell growth. Epiregulin activates two members of the ErbB family of receptor tyrosine kinases: epidermal growth factor receptor (EGFR) and ErbB-4. Epiregulin is a potent vascular smooth muscle cell-derived mitogen induced by Angiotensin II, endothelin-1 and Thrombin. Epiregulin acts as an autocrine growth factor in human epidermal keratinocytes and is part of auto- and cross-induction mechanisms involving HB-EGF, Amphiregulin and TGF α . Epiregulin is upregulated in pancreatic cancer and stimulates pancreatic cancer cell growth.

REFERENCES

1. Toyoda, H., et al. 1995. Epiregulin. A novel epidermal growth factor with mitogenic activity for rat primary hepatocytes. J. Biol. Chem. 270: 7495-7500.
2. Riese, D.J., et al. 1998. Activation of ErbB-4 by the bifunctional epidermal growth factor family hormone Epiregulin is regulated by ErbB-2. J. Biol. Chem. 273: 11288-11294.
3. Taylor, D.S., et al. 1999. Epiregulin is a potent vascular smooth muscle cell-derived mitogen induced by Angiotensin II, endothelin-1, and Thrombin. Proc. Natl. Acad. Sci. USA 96: 1633-1638.
4. Shirakata, Y., et al. 2000. Epiregulin, a novel member of the epidermal growth factor family, is an autocrine growth factor in normal human keratinocytes. J. Biol. Chem. 275: 5748-5753.
5. Zhu, Z., et al. 2000. Epiregulin is upregulated in pancreatic cancer and stimulates pancreatic cancer cell growth. Biochem. Biophys. Res. Commun. 273: 1019-1024.

CHROMOSOMAL LOCATION

Genetic locus: Ereg (mouse) mapping to 5 E1.

PRODUCT

Epiregulin (m): 293T Lysate represents a lysate of mouse Epiregulin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

Epiregulin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Epiregulin antibodies. Recommended use: 10-20 μ l per lane.

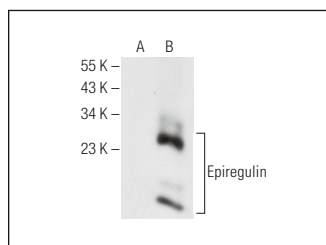
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Epiregulin (C-9): sc-376284 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Epiregulin expression in Epiregulin transfected 293T 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-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



Epiregulin (C-9): sc-376284. Western blot analysis of Epiregulin expression in non-transfected: sc-117752 (A) and mouse Epiregulin transfected: sc-120077 (B) 293T 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.