

Epiregulin (T-19): sc-25232

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

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3. Taylor, D.S., Cheng, X., Pawlowski, J.E., Wallace, A.R., Ferrer, P. and Molloy, C.J. 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.
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5. Zhu, Z., Kleeff, J., Friess, H., Wang, L., Zimmermann, A., Yarden, Y., Buchler, M.W. and Korc, M. 2000. Epiregulin is upregulated in pancreatic cancer and stimulates pancreatic cancer cell growth. *Biochem. Biophys. Res. Commun.* 273: 1019-1024.

SOURCE

Epiregulin (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Epiregulin of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25232 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Epiregulin (T-19) is recommended for detection of Epiregulin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 Epiregulin siRNA (m): sc-39419, Epiregulin shRNA Plasmid (m): sc-39419-SH and Epiregulin shRNA (m) Lentiviral Particles: sc-39419-V.

Molecular Weight of mature Epiregulin: 27 kDa.

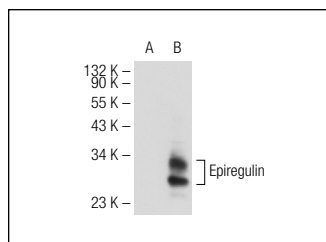
Molecular Weight of secreted Epiregulin: 6 kDa.

Positive Controls: Epiregulin (m): 293T Lysate: sc-120077.

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[™] 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[™] Mounting Medium: sc-24941.

DATA



Epiregulin (T-19): sc-25232. Western blot analysis of Epiregulin expression in non-transfected: sc-117752 (A) and mouse Epiregulin transfected: sc-120077 (B) 293T whole cell lysates.

PROTOCOLS

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

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Try **Epiregulin (C-9): sc-376284**, our highly recommended monoclonal alternative to Epiregulin (T-19).