SANTA CRUZ BIOTECHNOLOGY, INC.

Epiregulin (FL-162): sc-30215

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 TGFα. Epiregulin is upregulated in pancreatic cancer and stimulates pancreatic cancer cell growth.

CHROMOSOMAL LOCATION

Genetic locus: EREG (human) mapping to 4q13.3; Ereg (mouse) mapping to 5 E1.

SOURCE

Epiregulin (FL-162) is a rabbit polyclonal antibody raised against amino acids 1-162 representing full length Epiregulin of mouse origin.

PRODUCT

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

APPLICATIONS

Epiregulin (FL-162) is recommended for detection of Epiregulin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 (h): sc-39418, Epiregulin siRNA (m): sc-39419, Epiregulin shRNA Plasmid (h): sc-39418-SH, Epiregulin shRNA Plasmid (m): sc-39419-SH, Epiregulin shRNA (h) Lentiviral Particles: sc-39418-V 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 Lyste: sc-120077.

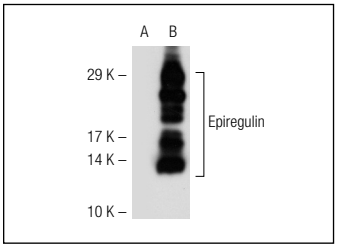
RECOMMENDED SECONDARY REAGENTS

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Epiregulin (FL-162): sc-30215. Western blot analysis of Epiregulin expression in non-transfected: sc-117752 (**A**) and mouse Epiregulin transfected: sc-120077 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Yang, L., et al. 2013. Prolidase directly binds and activates epidermal growth factor receptor and stimulates downstream signaling. J. Biol. Chem. 288: 2365-2375.

RESEARCH USE

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

PROTOCOLS

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