BACKGROUND

Epigen is an epithelial mitogen that belongs to the EGF ligand family for ErbB receptors. Comprising 152 amino acids, the Epigen protein contains 2 hydrophobic regions corresponding to a putative signal sequence and transmembrane domain, which flank a core of amino acids encompassing 6 cysteine residues and 2 putative N-linked glycosylation sites. In epithelial cells, Epigen stimulates the phosphorylation of ErbB-1 and mitogen-activated protein kinases and also activates a reporter gene containing enhancer sequences present in the c-Fos promoter. Epigen also stimulates the proliferation of HaCaT cells. With its ability to promote the growth of epithelial cells, Epigen may constitute a novel molecular target for wound-healing therapy.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

Epigen (H-60) is a rabbit polyclonal antibody raised against amino acids 51-110 mapping within an internal region of Epigen of human origin.

PRODUCT

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

STORAGE

Store at 4°C. **DO 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

Epigen (H-60) is recommended for detection of Epigen 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).

Epigen (H-60) is also recommended for detection of Epigen in additional species, including equine and canine.


Molecular Weight of Epigen: 15 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™ 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-2730 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-2641.

SELECT PRODUCT CITATIONS


RESEARCH USE

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