SANTA CRUZ BIOTECHNOLOGY, INC.

HB-EGF (M-18): sc-1414



BACKGROUND

Heparin binding epidermal-like growth factor (HB-EGF), a member of the EGF family of mitogens, binds to the EGF receptor (EGFR) and to heparin sulfate proteoglycans on the cell surface. HB-EGF was originally isolated from medium conditioned by the growth of the human histocytic lymphoma cell U-937 on the basis of its heparin-binding ability and its mitogenic activity for Balb-3T3 fibroblasts. The HB-EGF gene encodes a 208 amino acid precursor containing a signal peptide and transmembrane domain. Mature HB-EGF is a soluble protein 86 amino acids in length and results from the enzymatic cleavage of the membrane bound precursor. The membrane-bound form of HB-EGF has been identified as the diphtheria toxin receptor. Preincubation of Vero cells with phorbol 12-myristate 13-acetate (PMA) induces the proteolytic cleavage of HB-EGF outside the membrane anchor.

CHROMOSOMAL LOCATION

Genetic locus: HBEGF (human) mapping to 5q31.3; Hbegf (mouse) mapping to 18 B2.

SOURCE

HB-EGF (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at a C-terminal cytoplasmic domain of HB-EGF of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1414 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HB-EGF (M-18) is recommended for detection of precursor HB-EGF of mouse, rat and, to a lesser extent, 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 HB-EGF siRNA (h): sc-39420, HB-EGF siRNA (m): sc-39421, HB-EGF shRNA Plasmid (h): sc-39420-SH, HB-EGF shRNA Plasmid (m): sc-39421-SH, HB-EGF shRNA (h) Lentiviral Particles: sc-39420-V and HB-EGF shRNA (m) Lentiviral Particles: sc-39421-V.

Molecular Weight of HB-EGF: 22 kDa.

STORAGE

Store at 4° C, **D0 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.

RESEARCH USE

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

DATA



HB-EGF (M-18): sc-1414. Western blot analysis of human recombinant HB-EGF.

SELECT PRODUCT CITATIONS

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