SANTA CRUZ BIOTECHNOLOGY, INC.

EMAP II (H-92): sc-66879

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Endothelial monocyte-activating polypeptide (EMAP II), also known as small inducible cytokine subfamily E, member 1 (SCYE1), is a chemoattractant cytokine for monocytes and granulocytes that is inducible by apoptosis. TNFα treatment of murine meth A fibrosarcomas and B16 melanomas upregulates EMAP II mRNA production. The release of this cytokine renders the tumor-associated vasculature sensitive to tumor necrosis factor. EMAP II mRNA translates as a precursor protein, proEMAP II, which undergoes proteolysis to become the mature, biologically active cytokine. ProEMAP II may function in binding RNA as part of the tRNA synthetase complex in normal cells and in stimulating inflammatory responses after proteolytic cleavage in tumor cells.

CHROMOSOMAL LOCATION

Genetic locus: AIMP1 (human) mapping to 4q24; Aimp1 (mouse) mapping to 3 G3.

SOURCE

EMAP II (H-92) is a rabbit polyclonal antibody raised against amino acids 221-312 mapping at the C-terminus of EMAP II 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.

APPLICATIONS

EMAP II (H-92) is recommended for detection of precursor and mature EMAP II 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EMAP II (H-92) is also recommended for detection of precursor and mature EMAP II in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EMAP II siRNA (h): sc-61855, EMAP II siRNA (m): sc-61856, EMAP II shRNA Plasmid (h): sc-61855-SH, EMAP II shRNA Plasmid (m): sc-61856-SH, EMAP II shRNA (h) Lentiviral Particles: sc-61855-V and EMAP II shRNA (m) Lentiviral Particles: sc-61856-V.

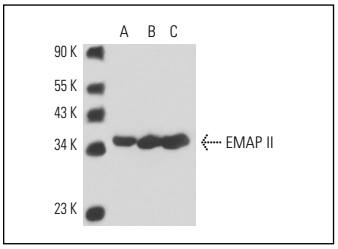
Molecular Weight of EMAP II: 38-40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HT-1080 whole cell lysate: sc-364183 or T98G cell lysate: sc-2294.

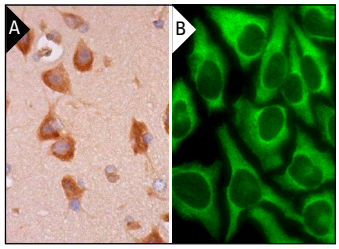
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



EMAP II (H-92): sc-66879. Western blot analysis of EMAP II expression in UV treated HeLa (**A**), T98G (**B**) and HT-1080 (**C**) whole cell lysates.



EMAP II (H-92): sc-66879. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells and glial cells (**A**). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**B**).

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.