

EMAP II (18): sc-136383



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. TNF α 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.

REFERENCES

1. Knies, U.E., et al. 2000. Expression of EMAP II in the developing and adult mouse. *Apoptosis* 5: 141-151.
2. Brabeck, C., et al. 2002. Expression of EMAP-II by activated monocytes/microglial cells in different regions of the rat hippocampus after trimethyltin-induced brain damage. *Exp. Neurol.* 177: 341-346.
3. Matschurat, S., et al. 2003. Regulation of EMAP II by hypoxia. *Am. J. Pathol.* 162: 93-103.
4. Mueller, C.A., et al. 2003. Spinal cord injury induces lesional expression of the proinflammatory and antiangiogenic cytokine EMAP II. *J. Neurotrauma* 20: 1007-1015.
5. Mueller, C.A., et al. 2003. Lesional expression of a proinflammatory and antiangiogenic cytokine EMAP II confined to endothelium and microglia/macrophages during secondary damage following experimental traumatic brain injury. *J. Neuroimmunol.* 135: 1-9.
6. Murray, J.C., et al. 2004. Endothelial monocyte-activating polypeptide-II (EMAP-II): a novel inducer of lymphocyte apoptosis. *J. Leukoc. Biol.* 75: 772-776.
7. LocusLink Report (LocusID: 2009). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

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

SOURCE

EMAP II (18) is a mouse monoclonal antibody raised against amino acids 16-138 of EMAP II of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-136383 X, 200 μ g/0.1 ml.

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

EMAP II (18) is recommended for detection of precursor and mature EMAP II of mouse, rat, human and canine 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

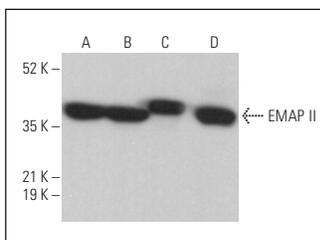
Molecular Weight of EMAP II: 38-40 kDa.

Positive Controls: C6 whole cell lysate: sc-364373, EOC 20 whole cell lysate: sc-364187 or HL-60 whole cell lysate: sc-2209.

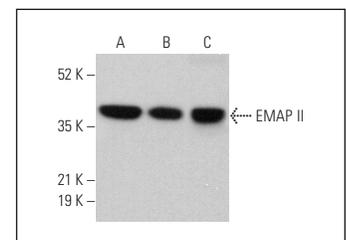
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



EMAP II (18): sc-136383. Western blot analysis of EMAP II expression in IMR-32 (A), HL-60 (B), EOC 20 (C) and C6 (D) whole cell lysates.



EMAP II (18): sc-136383. Western blot analysis of EMAP II expression in HCT-8 whole cell lysate (A) and human cerebral cortex (B) and mouse brain (C) tissue extracts.

RESEARCH USE

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

PROTOCOLS

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