

EMAP II (546-2): sc-32723

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.

CHROMOSOMAL LOCATION

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

SOURCE

EMAP II (546-2) is a mouse monoclonal antibody raised against recombinant EMAP II of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMAP II (546-2) is available conjugated to either phycoerythrin (sc-32723 PE) or fluorescein (sc-32723 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

EMAP II (546-2) 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 μ g per 100-500 μ g 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 flow cytometry (1 μ g per 1 x 10⁶ cells).

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.

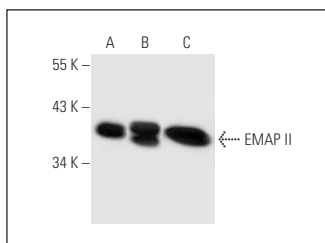
Molecular Weight of EMAP II: 38-40 kDa.

Positive Controls: EMAP II (h2): 293T Lysate: sc-170463, EMAP II (m): 293T Lysate: sc-120016 or THP-1 cell lysate: sc-2238.

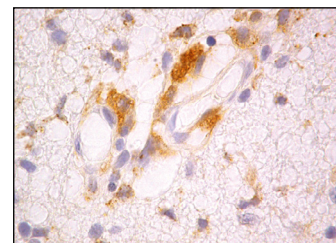
RECOMMENDED SUPPORT REAGENTS

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 Marker™ 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. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

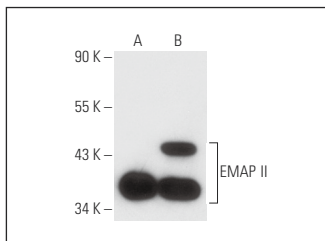
DATA



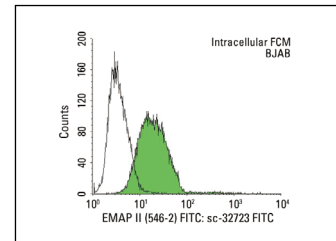
EMAP II (546-2): sc-32723. Western blot analysis of EMAP II expression in non-transfected 293T: sc-117752 (A), mouse EMAP II transfected 293T: sc-120016 (B) and THP-1 (C) whole cell lysates.



EMAP II (546-2): sc-32723. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat C6 glioblastoma. Kindly provided by Dr. Hermann Schluessener at U. of Tuebingen Steinbeis Center, Germany.



EMAP II (546-2): sc-32723. Western blot analysis of EMAP II expression in non-transfected: sc-117752 (A) and human EMAP II transfected: sc-170463 (B) 293T whole cell lysates.



EMAP II (546-2) FITC: sc-32723 FITC. Intracellular FCM analysis of fixed and permeabilized BJAB cells. Black line histogram represents the isotype control, normal mouse IgG_{2b}-FITC: sc-2857.

SELECT PRODUCT CITATIONS

1. Saber, M.M. 2022. EMAP II expression is increased on peripheral blood cells from non-Hodgkin lymphoma. *J. Immunol. Res.* 2022: 7219207.

STORAGE

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

RESEARCH USE

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