

## EMAP II (hBA-166): sc-4850

### BACKGROUND

Endothelial monocyte-activating polypeptide, also designated EMAP II or SCYE1 (for small inducible cytokine subfamily E, member 1), is a chemoattractant cytokine for monocytes and granulocytes. The protein encoded by this gene is a cytokine that is inducible by apoptosis. Tumor necrosis factor alpha 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 that 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

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### SOURCE

EMAP II (hBA-166) is produced in *E. coli* as 18.3 kDa biologically active protein corresponding to 166 amino acids of EMAP II of human origin.

### PRODUCT

EMAP II (hBA-166) is purified from bacterial lysates (>98%); supplied as 20 µg purified protein.

### RESEARCH USE

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

### BIOLOGICAL ACTIVITY

EMAP II (hBA-166) is biologically active as determined by the apoptotic effect on MCF-7 cells (human breast carcinoma cells) using a concentration of 20-40 ng/ml.

### RECONSTITUTION

In order to avoid freeze/thaw damaging of the active protein, dilute protein when first used to desired working concentration. Either a sterile filtered standard buffer (such as 50mM TRIS or 1X PBS) or water can be used for the dilution. Store any thawed aliquot in refrigeration at 2° C to 8° C for up to four weeks, and any frozen aliquot at -20° C to -80° C for up to one year. It is recommended that frozen aliquots be given an amount of standard cryopreservative (such as Ethylene Glycol or Glycerol 5-20% v/v), and refrigerated samples be given an amount of carrier protein (such as heat inactivated FBS or BSA to 0.1% v/v) or non-ionic detergent (such as Triton X-100 or Tween 20 to 0.005% v/v), to aid stability during storage.

### STORAGE

Store desiccated at -20° C; stable for one year from the date of shipment.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.