



## User Manual

### **Endothelial-Monocyte A Activating Polypeptide II (EMAP-II) (Human)**

**Cat. No. HEOPP-05013**



**Description:**

Endothelial-Monocyte Activating Polypeptide II (EMAP-II) is a tumor derived cytokine that exerts a wide range of activities on endothelial cells, monocytes and neutrophils. EMAP-II inhibits endothelial cell proliferation, vasculogenesis, neovessel formation, and can induce apoptosis. It is also chemotactic towards neutrophils and monocytes and induces myeloperoxidase activity from neutrophils. Of clinical importance, EMAP-II inhibits angiogenesis of vascular beds and suppresses the growth of primary and secondary tumors without affecting normal tissues. Mature EMAP-II is an 18.3 kDa protein, which is synthesized as the C-terminal portion of a biologically inactive precursor protein containing a propeptide of 146 amino acid residues.

**Source:**

*Escherichia coli*

**Unit:**

1 mg

**Reconstitution:**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

**Formulation:**

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Storage:**

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working

aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Molecular Weight:**

Approximately 18.3 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.

**Endotoxin:**

Less than 1 EU/μg of EMAP-II as determined by LAL method.

**Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

**Biological Activity:**

The ED50 determined by the apoptotic effect using serum free human MCF-7 cells is less than 40 ng/mL, corresponding to a specific activity of  $> 2.5 \times 10^4$  IU/mg.

**Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

**AA Sequence:**

SKPIDVSRLD LRIGCIITAR KHPDADSLYV EEVDVGEIAP RTVVSGLVNH  
VPLEQMQRNM VILLCNLKPA KMRGVLSQAM VMCASSPEKI EILAPPNGSV  
PGDRITFDAF PGEPDKELNP KKKIWEQIQP DLHTNDECVA TYKGVPFVEVK  
GKGVCRAQTM SNSGIK

**Purity:**

> 98% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

Cyagen Biosciences reserves all rights on the technical documents of its culture products. No part of this document may be reproduced or adapted for other purposes without written permission from Cyagen Biosciences.