DATASHEET
Version 20181206

EMAP-II, Human

Cat. No.: Z02732-20

Size: 20.0 ug

Synonyms: Endothelial-Monocyte A Activating Polypeptide II (EMAP-II), Human;

Description:

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.

Amino Acid Sequence:

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00001 SKPIDVSRLD LRIGCIITAR KHPDADSLYV EEVDVGEIAP
00041 RTVVSGLVNH VPLEQMQNRM VILLCNLKPA KMRGVLSQAM
00081 VMCASSPEKI EILAPPNGSV PGDRITFDAF PGEPDKELNP
00121 KKKIWEQIQP DLHTNDECVA TYKGVPFEVK GKGVCRAQTM
00161 SNSGIK
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by the apoptotic effect using serum free human MCF-7 cells is less than 40 ng/ml, corresponding to a specific activity of > 2.5×10^4 IU/mg.

Molecular Weight: Approximately 18.2 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.

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

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 98 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuEMAP-II as determined by LAL method.

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.

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