Product Data Sheet

Product Name:	EMAP II Human
Cat. No.:	GP20181
Batch No.:	1

Product Data

Purity	>98%	Source	Escherichia Coli.
Phycical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	AIMP1; EMAP2; EMAP-2; EMAPII; SCYE1; Multisynthetase complex auxiliary component p43; Endothelial monocyte-activating polypeptide 2; EMAP-II; p43.		
Amino Acid Sequence	SKPIDVSRLD LRIGCIITAR KHPDADSLYV EEVDVGEIAP RTVVSGLVNH VPLEQM QNRM VILLCNLKPA KMRGVLSQAM VMCASSPEKI EILAPPNGSV PGDRITFDAF PGEPDKELNP KKKIWEQIQP DLHTNDECVA TYKGVPFEVK GKGVCRAQTM SNSGIK.		
Solubility	It is recommended to reconstitute the lyophilized EMAP-II in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Lyophilized from a concentrated (1mg/ml) solution in water containing 20mM sodium Phosphate buffer pH=7.5 and 130mM sodium chloride.		

Introduction

EMAP-II also called SCYE1 is a tumor derived cytokine that plays a role in a wide variety 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. EMAP-II clinical value is inhibiting angiogenesis of vascular beds and suppressing the growth of primary and secondary tumors with no affect to normal tissues. SCYE1is specifically induced by apoptosis, and it is involved in the control of angiogenesis, inflammation, and wound healing. The release of this SCYE1 renders the tumor-associated vasculature sensitive to tumor necrosis factor. The precursor protein is identical to the p43 subunit, which is associated with the multi-tRNA synthetase complex, and it modulates aminoacylation activity of tRNA synthetase in

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normal cells. EMAP-2 plays a role in in the stimulation of inflammatory responses after proteolytic cleavage in tumor cells.

Biological Activity

Determined by the apoptotic effect on MCF-7 cells using a concentration of 20-30 ng/ml.

Stability

Lyophilized EMAP-II although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution EMAP-II should be stored at 4°C between 2-7 days and for future use below -18°C .Please prevent freeze-thaw cycles.

Background

EMAP-II Recombinant Human produced in E.Coli is a single, non-glycosylated polypeptide chain containing 166 amino acids and having a molecular mass of 18.3 kDa. The EMAP-II is purified by proprietary chromatographic techniques.

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