Product Data Sheet

Product Name:	Angiostatin K1-4
Cat. No.:	GP22719
Batch No.:	1

Product Data

Purity	>98%	Source	Human Fluid.
Phycical Appearance	solid	Shipping Condition	Shipped at Room temp.
Solubility	It is recommended to reconstitute the lyophilized Angiostatin K1-4 in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Lyophilized from a (1mg/ml) solution in containing 20mM Hepes buffer pH-8.2 & 20mM NaCl.		

Introduction

There are several proteolytic fragments or specific domains of proteins that act as inhibitors of angiogenesis. These include fragments of plasminogen such as Angiostatin protein kringles 1-4 and kringles 1-5, Endostatin, Restin, PEX, the N-terminal fragment of prolactin, and the Nterminally truncated platelet factor. Angiostatin is a proteolytic protein fragment of plasminogen that is comprised of the first 4 kringle regions. Angiostatin k1-4 prevents the growth of endothelial cells, and its systemic administration inhibits the growth of primary carcinomas in mice. Angiostatin Kringles 1-3 segment has a larger inhibitory activity than the Angiostatin kringles 1-4 fragment. The protease-activated angiostatin kringles 1-5 is the most potent plasminogen fragment with over 50 times larger endothelial cell specific inhibitory activity. Angiostatin kringles 1-5 systemic administration inhibits growth of fibrosarcoma and significantly reduces neovascularization.Angiostatin is an angiogenesis inhibitor in mouse serum and urine. Angiostatin is a 38 kDa protein fragment of the plasminogen composed of the 1st 4 kringle domains of plasminogen. Angiostatin K1-4 is also named plasminogen kringles 1-4 and PK1-4. Angiostatin protein is manufactured by the protelytic cleavage of plasminogen by a serine protease from several prostate carcinoma cell lines. The manufacturing of angiostatin by pancreatic cancer cells can be inhibited by TGF-beta 1 along with plasminogen activator inhibitor type-1 (PAI1).

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Biological Activity

Human Angiostatin Kringles 1-4 significantly inhibits basic-FGF induced endothelial cell proliferation and migration at concentration ranging from 300nM-1.0 uM.

Stability

Lyophilized Angiostatin Kringles 1-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution Angiostatin Kringles1-4 should be stored at 4°C between 2-7 days and for future use below -18°C .For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

Human Angiostatin kringles 1-4 is produced from Human Fluid is a glycosylated polypeptide chain which migrates as a doublet 50 kDa on SDS-PAGE. The Ang K1-4 is purified by proprietary chromatographic techniques.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA