

Datasheet Cat. No. P1271

# Recombinant Human Endostatin

## **Information**

	80781
Accession #	P39060
Alternate Names	
Source	Escherichia coli.
M.Wt	Approximately 20.1 kDa, a single non-glycosylated polypeptide chain contain 183 amino acids (C-terminal fragment of Collagen alpha-1(XVIII) chain).
AA Sequence	HSHRDFQPVL HLVALNSPLS GGMRGIRGAD FQCFQQARAV GLAGTFRA SSRLQDLYSI VRRADRAAVP IVNLKDELLF PSWEALFSGS EGPLKPGARI FSFDGKDVLR HPTWPQKSVW HGSDPNGRRL TESYCETWRT EAPSATGQAS SLLGGRLLGQ SAASCHHAYI VLCIENSFMT ASK
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 $\mu\text{m}$ filtered concentrated solution in PBS, pH 7.4.
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 $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED as determined to inhibiting the FGF basic-dependent proliferation of HUVEC migration is less than 2.0 $\mu$ g/mL in the presence of Anti-Human Endostatin Polyclonal Antibod
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Handling	

#### Components and Storage

Components	100µg	500µg	
Recombinant Human Endostatin	100µg	500µg	

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control	Person	Blow
Purity	> 96 % by SDS-PAGE and HPLC analyses.	- Reference to a second
Endotoxin	Less than 1 EU/ $\mu$ g of rHuEndostatin as detern	nined by LAL method.

## Description

Endostatin has been identified as a C-terminal fragment of Collagen type 18, a recently identified member of a family of collagen-like proteins referred to as multiplexin family. Endostatin specifically inhibits proliferation of endothelial cells although it does not affect the proliferation of EOMA cells. Endostatin also potently inhibits angiogenesis and tumor growth. Endostatin has an important role in endothelial cell adhesion and cytoskeletal organization. Endostatin can be found in vessel walls (elastic fibers) and basement membranes. Recombinant Endosatin expressed in yeast causes G1 arrest of endothelial cells, and endostatin treatment results in apoptosis of HUVE and HMVE cells.

### Reference

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- 3. G HuangandL Chen. 2009. Cancer Biother Radiopharm, 24: 589-96
- 4. DM Wei, Y Gao, XR Cao, et al. 2006. Biochem Biophys Res Commun, 345: 1398-404

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