

Recombinant Human Endostatin

Human, Recombinant (COL18A1)

Expressed in *Pichia P.*

Cat. No. CRP0868

Lot. No. (See product label)

PRODUCT INFORMATION

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 Endostatin expressed in yeast causes G1 arrest of endothelial cells, and endostatin treatment results in apoptosis of HUVE and HMVE cells.

Amino-Acid Sequence: 183 aa, glycosylated.

M. W.: 20 kDa

Recombinant: Expressed in *Pichia P.*

Purity: >96% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in PBS, pH 7.4.

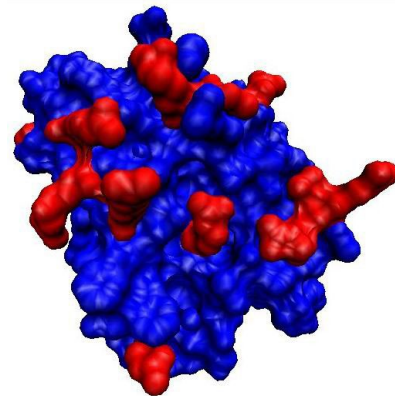
Biological Activity: Fully biologically active when compared to standard. The activity calculated by ECE migration inhibition was found to be 50,000IU/mg.

Endotoxin: Less than 1EU/µg of rHuEndostatin as determined by LAL method.

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.

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.

FOR RESEARCH USE ONLY



Endostatin monomer, basic amino acid residues shown in red [1KOE](#).

GENE INFORMATION

Gene Name: [COL18A1](#)

Synonyms: FLJ27325; KNO; KNO1; MGC74745; OTTHUMP00000115472; OTTHUMP00000115473; alpha 1 type XVIII collagen; antiangiogenic agent; endostatin; multi-functional protein MFP; XVIII chain precursor; Collagen alpha-1; XVIII chain precursor; collagen, type XVIII, alpha 1; human type XVIII collagen; COL18A1

mRNA Refseq: [NM_030582](#)

Protein Refseq: [NP_085059](#)

MIM: [120328](#)

GeneID: [80781](#)

UniProt ID: [P39060](#)

Chromosome Location: 21q22.3

Function: binding, extracellular matrix structural constituent, metal ion binding, protein binding, structural molecular activity, zinc ion binding.

REFERENCES

- Ohlund D, Ardnor B, et al. Expression pattern and circulating levels of endostatin in patients with pancreas cancer. *Int. J. Cancer*. 2008; 122(12):2805-2810.
- Zambon L, Honma HN, et al. A polymorphism in the angiogenesis inhibitor, endostatin, in lung cancer susceptibility. *Lung Cancer*. 2008; 59(2):276-278.
- Folkman, J. Antiangiogenesis in cancer therapy--endostatin and its mechanisms of action. *Exp. Cell. Res*. 2006; 312: 594-607.

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