



## Product Datasheet

**Product Name** Endostatin Human Recombinant  
**Cata No** CB500900  
**Source** *Pichia Pastoris*.  
**Synonyms**

### Description

Once a cluster of cancer cells reaches a diameter of about 1–2 mm, it must develop a blood supply in order to grow larger. Given that diffusion is no longer adequate to supply the cancerous cells with oxygen and nutrients and to remove wastes.

Therefore, these cells secrete substances that promote the formation of new blood vessels (angiogenesis), which are vital for the growth and persistence of solid tumors and their metastases. The production of several angiogenic factors (FGF-a, FGF-b, VEGF and VPF) is upregulated by tumors in order to stimulate angiogenesis. However, numerous malignant tumors also generate inhibitors of angiogenesis which include angiostatin and thrombospondin. The angiogenic phenotype is basically the end result of a net balance between the positive and negative regulators of neovascularization mentioned above. Endostatin's role is to inhibit endothelial proliferation, therefore it is an effective angiogenesis inhibitor.

Endostatin Human Recombinant produced in *Pichia Pastoris* is a single, glycosylated, polypeptide having a total molecular mass of 20,000 Dalton C-terminal fragment of collagen XVIII that has been shown to act as a potent inhibitor of angiogenesis

and tumor growth *in vitro* and *in vivo*. Induces tyrosine phosphorylation of Shc (SH<sub>2</sub> domain adapter protein) leading to specific inhibition in endothelial cell proliferation.

The Endostatin is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered liquid formulation.

### Biological Activity

The activity calculated by ECE migration inhibition was found to be 50,000IU/mg.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

The recombinant Human Endostatin is formulated with PBS.

### Stability

Endostatin although stable at 4°C for 30 days, should be stored desiccated below -20°C for periods greater than 30 days.

**Please avoid Freeze/Thaw cycles.**