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Certificate of Analysis and Data Sheet

Recombinant Human Angiostatin Kringles 1-3

Catalog No.
IP-03-284P

Source
Pichia Pastoris

Background

Angiostatin was observed initially as an angiogenesis inhibitor, specifically inhibiting endothelial cell proliferation. Recombinant angiostatin with one less kringle domain (kringle 1-3) acts as an effective inhibitor of angiogenesis induced by angiogenin, FGF basic, and VEGF.

Description

Recombinant Human Angiostatin produced in Pichia Pastoris is a single, non-glycosylated polypeptide chain having a molecular mass of 29711 Dalton. Recombinant Human Angiostatin is a proteolytic fragment of plasminogen containing the first three kringle structures. A specific inhibitor of endothelial cell growth, and angiogenesis with more active relative to kringles 1-4. Recombinant Human Angiostatin reduces endothelial cell proliferation and acts as a potent inhibitor of angiogenesis and tumor growth. Human Angiostatin is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered liquid formulation.

Purity

Greater than 95.0% as determined by:

- 1) Analysis by RP-HPLC.
- 2) Anion-exchange FPLC.
- 3) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

Formulation

1mg/ml containing 0.5X PBS.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Dimers and aggregates

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

Biological Activity

Inhibitory activity (ED₅₀=70 nm) relative to Kringles 1-4 (ED₅₀=135 nm). Kringles 1-3 acts as inhibitor of endothelial cell growth and angiogenesis.

Endotoxin

Less than 0.1 ng/μg (IEU/μg) of Recombinant Kringles 1-3

Protein content

Protein quantitation was carried out by two independent methods:

- 1) UV spectroscopy at 280 nm using the absorbency value of 2.08 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
- 2) Analysis by RP-HPLC, using a calibrated solution of Recombinant Human Angiostatin K1-3 as a Reference Standard.

Stability

Recombinant Kringles 1-3 should be stored at 4°C, and for long term use it is recommended to add a carrier protein (0.1% BSA or HSA).

Reference

- 1) van Oers, N.S.C. *et al.* (1994) Production and characterisation of monoclonal antibodies specific for the murine T cell receptor zeta chain. *J. Immunol. Methods* 170: 261-268.
- 2) Anderson, P. (1995) mAb reative with lymphocyte restricted intracellular antigens in Leucocyte Typing V p325, Oxford University Press.

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