

Recombinant Human Angiostatin Kringles 1-3

Certificate of Analysis and Data Sheet

➤ Source: Pichia Pastoris	➤ Catalog No. PRO-284
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➤ **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. rHuAng K1-3 is a proteolytic fragment of plasminogen containing the first three kringle structures. A specific inhibitor of endothelial cell growth and angiogenesis. More active relative to kringles 1-4.
rHuAng K1-3 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.

➤ **Formulation:**

1mg/ml containing 0.5X PBS.

➤ **Stability:**

Recombinant Human Angiostatin K1-3 should be stored at 4⁰c. For long-term storage it is recommended to add a carrier protein (% HSA or BSA).

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained.

➤ **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 Angiostatin.

➤ **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 Angiostatin as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.