

Bovine Pancreatic Trypsin Inhibitor (Aprotinin/BPTI)

Certificate of Analysis and Data Sheet

➤ Source: Bovine lung	➤ Catalog No. PRO-285
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➤ **Background:**

Aprotinin inhibits the activity of several proteolytic enzymes such as chymotrypsin, kallikrein, plasmin and trypsin. It is present in blood and in most tissues, with a high concentration in lung, inhibits pro-inflammatory cytokine release and maintains glycoprotein homeostasis. In platelets, aprotinin reduces glycoprotein loss (e.g., GpIb, GpIIb/IIIa), while in granulocytes it prevents the expression of pro-inflammatory adhesive glycoproteins

➤ **Description :**

Aprotinin is a natural proteinase inhibitor polypeptide consisting of fifty-eight amino acids arranged in a single polypeptide chain, cross-linked by three disulfide bridges and having a molecular mass of 6512 Daltons.
Aprotinin is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

➤ **Formulation:**

Aprotinin (1mg/ml) was lyophilized with no additives.

➤ **Solubility:**

It is recommended to reconstitute the Aprotinin in sterile 18MO-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

➤ **Stability:**

Lyophilized Aprotinin although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution Aprotinin should be stored at 4 C between 2-7 days and for future use below -18 C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 98.0% as determined by:

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

➤ **Biological activity:**

This Aprotinin activity was found to be 6×10^6 IU/mg.

➤ **Endotoxin:**

Less than 0.1 ng/ μ g (IEU/ μ g) of Aprotinin.

➤ **Usage:**

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