

PTI

Native Bovine Aprotinin/Pancreatic Trypsin Inhibitor

Catalog No.	CRA207A	Quantity:	100 mg
	CRA207B		250 mg
	CRA207C		1 g

Alternate Names: Bovine Pancreatic Trypsin Inhibitor, BPTI, BPI

Description: Aprotinin inhibits the activity of several proteolytic enzymes such as chymotrypsin, kallikrein, plasmin and trypsin. Aprotinin is present in blood and in most tissues, with a high concentration in lung. Aprotinin 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 (e.g., CD11b).
Aprotinin is a natural proteinase inhibitor polypeptide consisting of 58 amino acids {C₂₈₄H₄₃₂N₈₄O₇₉S₇} arranged in a single polypeptide chain, cross-linked by three disulfide bridges and having a MW = 6.512 kDa.

GenelD: 404172

Source: Bovine Lung

Formulation: The protein (1 mg/ml) is sterile filtered and lyophilized with no additives.

Purity: Greater than 98.0% as determined by analysis by RP-HPLC and SDS-PAGE.

Endotoxin Level: Less than 0.1 ng/μg (1 EU/μg) of the protein.

Biological Activity: 6,300 KIU (Kallikrein Inactivator Units) per mg, 4.85 TIU/mg.
1 Unit corresponds to 1 biological kallikrein inhibitor unit (KIU).
1 TIU = 1,300 KIU.

Reconstitution: **Centrifuge vial prior to opening.** First add sterile water to the vial to fully solubilize the protein to a concentration not less than 100 μg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.

Storage & Stability: Lyophilized samples are stable at room temperature for 3 weeks, but it is recommended to store them desiccated at -20°C to -80°C. Upon reconstitution, protein may be stored at 2-4°C for one week and for six months at -20°C to -80°C. Add a carrier protein (0.1% HSA or BSA) as a stabilizer for long term storage. **Aliquot working solutions to avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

