

# Native Bovine Pancreatic Trypsin Inhibitor

**Cat. No.** PTI-603B    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | NativeBovine PTI was expressed in bovine lung. Itsmolecular weight is 6510 Dalton.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Bovine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>           | Bovine Lung                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>      | The drug PTI, is thebovine version of the small protein basic pancreatic trypsin inhibitor, orBPTI, which inhibits trypsin and related proteolytic enzymes. Under the tradename Trasylol, aprotinin was used as a medication administered by injectionto reduce bleeding during complex surgery, such as heart and liver surgery.Its main effect is the slowing down of fibrinolysis, the process that leadsto the breakdown of blood clots. The aim in its use was to decrease the needfor blood transfusions during surgery, as well as end-organ damage due tohypotension (low blood pressure) as a result of marked blood loss. |
| <b>Form</b>             | Lyophilized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Molecular Mass</b>   | 6.51 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Endotoxin</b>        | <0.1 ng/μg="" of="">                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>           | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications</b>     | Can be used for theisolation of proteins as well as for biopharmaceutical downstream purification to inhibit undesired proteolytic activity of serine proteasessuch as trypsin,                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

plasmin, trypsinogen, urokinase, chymotrypsin, kallikrein, elastase and others. Can also be used during immunodiffusion, radioimmunoassay or enzyme-linked immunoassay procedures. Aprotinin is used in chromogenic assays for the determination of antithrombin III, heparin,  $\alpha$ 2-macroglobulin, factor Xa and thrombin to inhibit disturbing kallikrein or plasmin activities.

**Storage** Stable for 2 years at -20°C . Avoid repeated freeze-thaw cycles.

**Reconstitution** Centrifuge vial prior to opening. Reconstitute in distilled water or PBS to desired concentration. The optimal concentration should be determined by the user for each specific application.

## GENE INFORMATION

**Gene Name** PTI pancreatic trypsin inhibitor [ Bostaurus ]

**Official Symbol** PTI

**Synonyms** PTI; pancreatic trypsin inhibitor; BPI; BPTI; MGC148815; aprotinin; basic protease inhibitor; Pancreatic trypsin inhibitor

**Gene ID** 404172

**mRNA Refseq** NM\_001001554

**Protein Refseq** NP\_001001554

**UniProt ID** P00974

**Chromosome Location** chromosome: 13

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**Function**

peptidase inhibitor activity; serine-type endopeptidase inhibitor activity; potassium channel inhibitor activity

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