

## Aprotinin

<b>CATALOG #:</b>	4690-5	5 mg
	4690-100	100 mg
	4690-1000	1 gram

**SOURCE:** Bovine lung

**PURITY:** >98% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of Aprotinin.

**FORM:** Sterile filtered and lyophilized with no additives

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 1 mg/ml. The solution can then be diluted into other aqueous buffers and store at 4° C for 1 week or -20° C for future use. For long-term storage, it is recommend to add a carrier protein (e.g., 0.1% BSA). Prevent freeze/thaw cycles.

### STORAGE CONDITIONS:

The lyophilized Aprotinin is best-stored desiccated below 0° C. Reconstituted Aprotinin should be stored at working aliquots at -20° C.

### DESCRIPTION:

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., Gplb, GplIb/IIIa), while in granulocytes it prevents the expression of pro-inflammatory adhesive glycoproteins. 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. It has been found to inhibit SARS-CoV and SARS-CoV-2 *in vitro*.

**BIOLOGICAL ACTIVITY:** 6 x 10<sup>6</sup> IU/mg.

Unit Definition: 1 Unit corresponds to 1 biological kallikrein inhibitor unit (KIU)

1 TIU =1,300 KIU. (Activity 6,000 KIU (Kallikrein Inactivator Units) per mg, 4.85 TIU/mg.)

### RELATED PRODUCTS:

AEBSF, HCl (**Cat. No. 1644-200, 1G**)  
 Aprotinin (**Cat. No. 4690-5, 100, 1000**)  
 Calyculin A (**Cat. No. 1562-025**)  
 BCA Protein Quantitation Kit (**Cat. No. K812-1000**)  
 Bradford Protein Quantitation Kit (**Cat. No. K810-1000**)  
 E-64 (**Cat. No. 1739-5, 25**)  
 EZBlock™ Phosphatase Inhibitor Cocktail I (**Cat. No. K273-1, 1EA**)  
 EZBlock™ Phosphatase Inhibitor Cocktail II (**Cat. No. K275-1, 1EA**)  
 EZBlock™ Phosphatase Inhibitor Cocktail III (**Cat. No. K276-1, 1EA**)  
 EZBlock™ Phosphatase Inhibitor Cocktail IV (**Cat. No. K282-1,1EA**)  
 EZBlock™ Protease Inhibitor Cocktail EDTA-Free (**Cat. No. K272-1, 5, 1EA**)  
 EZBlock™ Protease Inhibitor Cocktail II (**Cat. No. K277-1EA**)  
 EZBlock™ Protease Inhibitor Cocktail III (**Cat. No. K278-1EA**)  
 EZBlock™ Protease Inhibitor Cocktail IV (**Cat. No. K279-1, 1EA**)  
 EZBlock™ Universal Protease and Phosphatase Inhibitor Cocktail (**Cat. No. K283-1, 1EA**)  
 EZBlock™ Universal Protease and Phosphatase Inhibitor Cocktail, EDTA-Free (**Cat. No. K284-1, 1EA**)  
 EZLys™ Bacterial Protein Extraction Reagent (**Cat. No. 8001-100, 500**)  
 Leupeptin, Hemisulfate (**Cat. No. 1648-25, 50, 100**)  
 EZLys™ Lysozyme, Human (**Cat. No. 8005-1G, 5G**)  
 Nafamostat Mesylate (**Cat. No. 1760-10, 50**)  
 Okadaic Acid (**Cat. No. 1543-025**)  
 Okadaic Acid, Ammonium Salt (**Cat. No. 1766-025**)  
 Okadaic Acid, Potassium Salt (**Cat. No. 1765-025**)  
 Okadaic Acid, Sodium Salt (**Cat. No. 1764-025**)  
 PMSF (**Cat. No. 1548-5**)  
 Pepstatin A (**Cat. No. 1732-25, 100**)  
 Protease Inhibitor Cocktail (**Cat. No. K271-500**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**