

Aprotinin

CATALOG #:	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 10⁶ 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.