

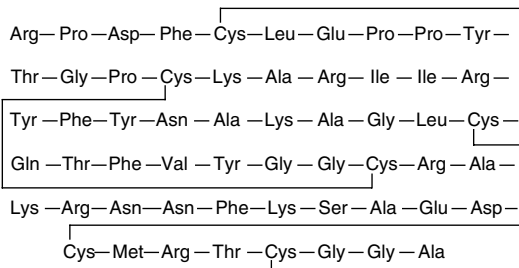
Product Information



Aprotinin

Item No. 14716

CAS Registry No.: 9087-70-1
Synonyms: Bovine Pancreatic Trypsin Inhibitor, BPTI
MF: C₂₈₄H₄₃₂N₈₄O₇₉S₇
FW: 6,511.4
Purity: ≥95-100%
Stability: ≥2 years at 4°C
Supplied as: A white to off-white crystalline solid



Laboratory Procedures

For long term storage, we suggest that aprotinin be stored as supplied at 4°C. It should be stable for at least two years.

Aprotinin is supplied as a white to off-white crystalline solid. Aprotinin is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, and also sparingly soluble in aqueous solutions. We do not recommend storing the aqueous solution for more than one day.

Aprotinin is a reversible inhibitor of serine proteases such as trypsin ($K_i = 0.06 \text{ pM}$), chymotrypsin ($K_i = 9.5 \text{ nM}$), and kallikrein ($K_i = 0.8 \text{ nM}$).¹ It is a much weaker inhibitor of thrombin ($K_i = 0.1\text{-}0.8 \text{ mM}$) and trypsinogen ($K_i = 2 \text{ }\mu\text{M}$).¹ Aprotinin also competitively inhibits nNOS and iNOS with K_i values of 50 and 78 μM , respectively.² Aprotinin is widely used as a protein purification tool to prevent proteases present in tissue samples from degrading the protein of interest.

References

1. Capasso, C., Rizzi, M., Menegatti, E., *et al.* Crystal structure of the bovine α -chymotrypsin:Kunitz inhibitor complex. An example of multiple protein:protein recognition sites. *J. Mol. Recognit.* **10(1)**, 26-35 (1997).
2. Venturini, G., Colasanti, M., and Ascenzi, P. Aprotinin, the first competitive protein inhibitor of NOS activity. *Biochem. Biophys. Res. Commun.* **249**, 263-265 (1998).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14716

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 08/01/2013

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com