

Aprotinin (Bovine Lung)

Cat #: A-CSH008

Size: 25mg, 100mg

Storage: 2-8 °C (24 months)

Product Description

Product Name	Aprotinin (Bovine Lung)
Cat #	A-CSH008
CAS Number	9087-70-1
Molecular Formula	$C_{284}H_{432}N_{84}O_{79}S_7$
Molecular Weight	6511.44
Appearance	Grayish-white to white powder
Enzyme Activity	> 6000 KIU/mg
Solubility	Soluble in water (≥ 5 mg/mL)

Aprotinin is a white or slightly yellow powder with no odor. It is easily soluble in water and soluble in 70% ethanol and 50% acetone. Aprotinin is a single-chain basic peptide extracted and purified from bovine lungs. It does not contain carbohydrates and has a molecular weight of 6511.44. As a broad-spectrum serine protease inhibitor, aprotinin can inhibit enzymes such as trypsin, chymotrypsin, plasmin, kallikrein, and elastase. Due to its compact tertiary structure, aprotinin exhibits relatively stable enzymatic activity and is insensitive to changes in pH, high temperature, organic solvents, and other proteases.

Usage

Each milligram of aprotinin can inhibit 16,000 units of trypsin activity. For example, if the experiment requires the inhibition of trypsin (1:250) with a total activity of 60 mg, approximately 1 mg of aprotinin should be added. Aprotinin powder should be stored in a refrigerated state and dissolved before use. Aprotinin solution exhibits good stability and

can maintain activity for up to 7 days under refrigeration. However, to prevent microbial growth, it is recommended to store the solution in a frozen state. The optimal pH range for aprotinin is generally between pH 5.0 and 9.0. Beyond this range, aprotinin is prone to dissociation from the enzyme molecules.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.