

Elastase

Cat: E8211

Specification: 25mg /100mg

Storage: Store at 2-8°C, and it is valid for 1 year.

Product Information

CAS: 39445-21-1

International Systematic Classification Number: EC: 4.6.1.19

English Name: Elastase

Appearance (Character): Freeze-dried Powder

Molecular Weight: 25.9 kDa

Optimal pH: 8.5

Isoelectric Point: 9.5

Purity: 97% Protein

Source: Porcine Pancreas

Introduction

Elastase is a serine protease that also exhibits the ability to hydrolyze amides and esters. It is produced in the pancreas as an inactive zymogen and subsequently activated by trypsin in the duodenum. This enzyme finds applications in tissue dissociation, enhancing membrane protein solubility, and protein sequence research.

At neutral pH and concentrations exceeding 0.25%, elastase exhibits poor solubility. Prior to dilution into reaction mixtures or media, it is advisable to prepare the initial solution in KCl or alkaline buffer to counteract changes in ionic strength or pH. The enzyme remains stable across a pH range of 4.0-10.4.

Unit Definition: One unit of elastase activity is defined as the amount required to cleave 1 micro M of N-succinyl-L-alanyl-L-alanyl-L-prolyl-L-alanine-p-nitroanilide per minute at 25°C and pH 8.0.

Inhibitors: Elastase activity is competitively inhibited by dipeptide derivatives of alanine, valine, leucine, and isoleucine. It is also inhibited by naturally occurring inhibitors such as serpins, modified natural inhibitors, and sulfate-modified lipids.

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call

400-968-6088 for consultation.

4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.