

CELA1

Native Porcine Pancreatic Elastase Suspension

Catalog No.	CRP272	Quantity:	1000 mg
Alternate Names:	Chymotrypsin-like elastase family member 1, Elastase-1, ELA1		
Description:	Porcine Pancreatic Elastase is unique among proteases in its ability to hydrolyze native elastin, a substrate not attacked by trypsin, chymotrypsin or pepsin. Soybean trypsin inhibitor and kallikrein inhibitor suppress proteolytic but not elastolytic activity. Elastase is chromatographically prepared from the euglobin fraction of porcine pancreas by the method of Lewis et al. then 2X crystallized and assayed using a method adapted from that of Feinstein et al., Biochem. Biophys. Res. Comm., 50, 1020 (1973) and using the more soluble substrate of Bieth et al., Biochem. Med., 11, 350 (1974). Optimum pH is 8.5. Supplied as aqueous suspension that is free of trypsin.		
UniProt ID:	P00772		
Source:	Porcine pancreas		
Molecular Weight:	25.5 kDa		
Unit Definition:	One unit will hydrolyze 1 micromole of N-succinyl-L-alanyl-L-alanyl-L-alanine-p-nitroanilide per minute at pH 8.3 and 25°C		
Purity:	> 90% (biuret)		
Specific Activity:	≥ 4.0 units/mg protein using the substrate Suc-(Al) ₃ -pNA, lot specific		
Biological Activity:	Report results, units/ml		
Concentration:	Report results, mg protein/ml		
Trypsin:	None detected using Nα-Benzoyl-L-arginine ethyl ester (BAEE) substrate		
Chymotrypsin:	Report results, u/ml, using N-Acetyl-L-tyrosine ethyl ester (ATEE) substrate		
Endotoxin:	Report results, EU/ml		
Formulation:	Aqueous suspension.		
Application Notes:	Aqueous liquid suspensions should be aseptically handled to avoid bacterial contamination. Due to the viscous nature of the aqueous suspension the vial should be rinsed to recover contents. Elastase has poor solubility at neutral pH and at concentrations greater than 0.25%. This preparation must be diluted to dissolve the enzyme. It is helpful to make primary solutions in KCl or alkaline buffers before diluting into the reaction mixtures or media, compensating for ionic strength or pH changes. The diluted enzyme should be sterile filtered before use. Suitable for the isolation of Type II lung cells.		
EC Number:	254-453-6		
Storage & Stability:	Store at 2-8°C, DO NOT FREEZE		
Country of Manufacture:	USA. Produced from animal source starting material of USDA-approved origin, collected in USDA-approved facilities or equivalent, inspected to be free of disease and suitable for exportation.		

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