

CELA1

Native Porcine Pancreatic Elastase

Catalog No.	CRP262B CRP262C	Quantity:	10 mg 20 mg
Alternate Names:	Chymotrypsin-like elastase family member 1, Elastase-1		
Description:	Porcine Pancreatic Elastase was chromatographically prepared from the euglobin fraction of porcine pancreas by the method of Lewis et al. then twice crystallized. Supplied as a salt free lyophilized powder that is free of trypsin and chymotrypsin. <i>Lewis, U.J. et al. (1956) J. Biol. Chem. 22:705</i>		
UniProt ID:	P00772		
Gene ID:	396766		
Source:	Pig pancreas		
Molecular Weight:	25.5 kDa		
Formulation:	Lyophilized from a salt free buffer. Free of trypsin, chymotrypsin, lipase, alpha-amylase, and the carboxypeptidases. This high purity elastase is isolated from 2X crystallized elastase. The 2X elastase is chromatographed on DEAE-cellulose at pH 8.8 to remove anionic non-specific protein. The elastolytic effluent is chromatographed at pH 5.0 on CM-cellulose recovering the highest specific activity by elution with salt gradient. Trace trypsin, and chymotrypsin contamination is removed by affinity chromatography.		
Purity:	Homogenous on 15% polyacrylamide electrophoresis at pH 4.5 and on gel exclusion chromatography (G200) at pH 5.0 and 25°C. Trypsin not detected on 0.5 mg elastase after more than 24 hour incubation at 25°C on the substrate N-benzoyl-DL-arginine-pNA (BAPNA). Alpha-chymotrypsin not detected on 0.5 mg elastase after more than 24 hour incubation at 25°C on the substrate N-benzoyl-L-tyrosine ethyl ester (BTEE).		
Extinction Coefficient:	$E^{0.1\%}_{280nm} = 0.985$		
Biological Activity:	Assay: 5-10 µg in 0.1M Tris pH 8.8 at 37°C. containing 0.2mM Suc-(Al)3-pNA.		
Specific Activity:	<p>> 115 units/mg of protein on the substrate elastin-orcein. One unit will solubilize 1 mg of elastin in 20 minutes at pH 8.8 and 37°C.</p> <p>> 9 units/mg of protein on the substrate Suc-Ala-Ala-Ala-pNA. One unit will hydrolyze 1 µmole per minute at pH 8.3 and 25°C.</p>		
Reconstitution:	Centrifuge vial prior to opening. Reconstitute with 0.05M Na Acetate, 0.1M NaCl pH 5.0 to 1 mg/ml or desired concentration, aliquot and store at -20°C to -80°C.		
Storage & Stability:	Stable for 1 year at 2-8°C.		

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