

## ELANE

### Native Human Neutrophil Elastase

<b>Catalog No.</b>	CSI20183A	<b>Quantity:</b>	0.5 mg
	CSI20183B		1.0 mg

**Alternate Names:** Bone marrow serine protease, Elastase-2, Human leukocyte elastase, HLE, PMN elastase

**Description:** Human neutrophil elastase purified chromatographically from human leukocytes of purulent sputum.

**UniProt ID:** P08246

**Gene ID:** 1991

**Source:** Human neutrophils

**Molecular Weight:** 29.5 kDa

**Formulation:** Lyophilized, salt free

**Purity:** >95% by SDS-PAGE analysis  
No detectable cathepsin G, lysozyme, myeloperoxidase

**Extinction Coefficient:**  $E^{0.1\%}_{280\text{nm}} = 0.985$

**Biological Activity:** On unit will hydrolyze 1 nM of substrate per minute at 25°C and pH 7.5

**Specific Activity:** 800-900 units per mg of protein on the substrate Suc-Ala-Ala-Ala-pNA  
15,000-19,000 units/mg with substrate MeO-Suc-Ala-Ala-Pro-Val-pNA

**Handling:** Acidic pH 5.0 protects the elastase from autolysis and proteolysis. Inactivation may occur at pH 8.0 due to autolysis and/or proteolysis by trypsin such as bovine pancreatic trypsin. Proteolysis can be inhibited by benzamidine. Autolysis and proteolysis can be inhibited by elastatinal. However, elastatinal is also an inhibitor of elastase.

Recommended concentrations and solutions for reconstitution:

1. 1 mg/ml in 0.05 M Na Acetate pH 5.0 containing 0.1 M NaCl. Stable 7 days at 5°C (on ice)
2. 10 mg/ml in 50% glycerol/50% 0.02 M Na Acetate pH 5. Stable at least 60 days at -20°C with 20 cycles between -20°C and 5°C
3. May be reconstituted at 10 mg/ml in 2 mM HoAc and re-lyophilized in smaller quantities

**Storage & Stability:** Store as supplied for up to 1 year at 2-8°C.

**Certification:** Prepared from tissue shown to be non-reactive for HbsAG, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

