

## ELANE

### Native Human Neutrophil Elastase

<b>Catalog No.</b>	CRN115A	<b>Quantity:</b>	100 µg
	CRN115B		1.0 mg
	CRN115C		5.0 mg

**Alternate Names:** Neutrophil elastase, Bone marrow serine protease, Elastase-2, Human leukocyte elastase, HLE, Medullasin, PMN elastase, ELA2

**Description:** Neutrophils, also known as neutrophilic polymorphonuclear leukocytes, are the major class of white blood cell in human peripheral blood. They, have a multilobed nucleus and neutrophilic granules, and are phagocytes and have an important role in engulfing and killing extracellular pathogens.

The neutrophil form of elastase is 218 amino acids long, with two asparagine-linked carbohydrate chains. Current studies show that both Cathepsin G and Neutrophil Elastase are key enzymes for tissue injury caused by activated neutrophils, such as occurs in Acute Lung injury..

**Gene ID:** 1991

**UniProt ID:** P08246

**Concentration:** ≥ 1.0 mg/ml

**Source:** Human neutrophils

**Molecular Weight:** 29.5 kDa

**Purity:** ≥ 96% by SDS-PAGE

**Formulation:** Sterile-filtered 50 mM sodium acetate, 600 mM NaCl, pH 5.5

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

**Biological Activity:** ≥ 40 U/mL

**Specific Activity:** ~20 units/mg, lot specific, measured as one unit will hydrolyze one micromole of Methoxy succinyl-alanine-alanine-proline-valine-p-nitroanilide per minute at 37 °C and pH 7.5.

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

**Certification:** Non-Infectious Disease Certification: Non-reactive for HIV-1/HCV/HBV by NAT; HBsAg, HCV Ab, HIV-1&2 Ab and RPR by currently approved FDA methods. However, because no test method can offer complete assurance that infectious agents are absent, this material should be handled at Bio-Safety Level 2 (BSL 2) as recommended for potentially infectious human serum or blood specimen in the CCD/NIH manual "Biosafety in Microbiological and Biomedical Laboratories", 2009.

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