

Product Information

MemDX™ Membrane Protein Human ELANE (Elastase, neutrophil expressed) expressed in *E.coli* for Antibody Discovery

Cat. No.: **MP1568J**

This product is for research use only and is not intended for diagnostic use.

This product is a 52.6 kDa Human ELANE membrane protein expressed in *E.coli*. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

ELANE

Protein Length

Partial (30-267aa)

Protein Class

Drug Target

Molecular Weight

52.6 kDa

Sequence

IVGGRRARPHAWPFMVSLQLRGGHFCGATLIAPNFVMSAAHCVANVNVRAVRVVLGAHNLSRREPTRQVFAVQRIFENGYDPVNL

Product Description

Expression Systems

E.coli

Tag

N-GST

Form

Liquid or Lyophilized powder

Reconstitution

Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-58% of glycerol (final concentration).

Purity

>90% as determined by SDS-PAGE

Buffer

Liquid: Tris/PBS-based buffer, 5%-50% glycerol

Lyophilized powder: Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

ELANE

Full Name

Elastase, neutrophil expressed

Introduction

Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode structurally similar proteins. The encoded preproprotein is proteolytically processed to generate the active protease. Following activation, this protease hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix. The enzyme may play a role in degenerative and inflammatory diseases through proteolysis of collagen-IV and elastin. This protein also degrades the outer membrane protein A (OmpA) of *E. coli* as well as the virulence factors of such bacteria as *Shigella*, *Salmonella* and *Yersinia*. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is present in a gene cluster on chromosome 19.

Alternative Names

Bone marrow serine protease; ELA2; ELANE; Elastase 2; Elastase 2 neutrophil; Elastase neutrophil expressed; Elastase-2; ELNE_HUMAN; GE; Granulocyte derived elastase; HLE; HNE; Human leukocyte elastase; Leukocyte elastase; Medullasin; NE; Neutrophil elastase; PMN E; PMN elastase; Polymorphonuclear elastase; SCN1; GE; NE; SCN1; PMN-E

Gene ID

[1991](#)

UniProt ID

[P08246](#)