



# Anti-ELANE (aa 168-267) polyclonal antibody (DPAB-DC842)

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

## PRODUCT INFORMATION

<b>Antigen Description</b>	Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins. The product of this gene hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the proteins release from activated neutrophils. The enzyme may play a role in degenerative and inflammatory diseases by its proteolysis of collagen-IV and elastin of the extracellular matrix. This protein 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 clustered with other serine protease gene family members, azurocidin 1 and proteinase 3 genes, at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation.
<b>Immunogen</b>	ELA2 (NP_001963, 168 a.a. ~ 267 a.a) partial recombinant protein with GST tag. The sequence is VLQELNVTVVTSLCRRSNVCTLVGRQAGVCFGDSGSPLVCNGLIHGIASFVRGGCASGL YPDAFAPVAQFVNWIDSIIQRSEDNCPHPRDPDPASRTH
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB (Recombinant protein), ELISA,
<b>Size</b>	50 µl
<b>Buffer</b>	50 % glycerol

<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ELANE elastase, neutrophil expressed [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	ELANE
<b>Synonyms</b>	ELANE; elastase, neutrophil expressed; GE; NE; HLE; HNE; ELA2; SCN1; PMN-E; neutrophil elastase; elastase-2; medullasin; PMN elastase; leukocyte elastase; elastase 2, neutrophil; human leukocyte elastase; polymorphonuclear elastase; bone marrow serine protease; granulocyte-derived elastase;
<b>Entrez Gene ID</b>	<a href="#">1991</a>
<b>Protein Refseq</b>	<a href="#">NP_001963</a>
<b>UniProt ID</b>	<a href="#">P08246</a>
<b>Chromosome Location</b>	19p13.3
<b>Pathway</b>	Activation of Matrix Metalloproteinases; Collagen degradation; Extracellular matrix organization; Systemic lupus erythematosus
<b>Function</b>	RNA polymerase II transcription corepressor activity; cytokine binding; endopeptidase activity; heparin binding