



# Recombinant Human Neutrophil Elastase Protein [GST] (DAGC306)

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

## PRODUCT INFORMATION

<b>Product Overview</b>	A DNA sequence encoding the Homo sapiens (Human) Neutrophil elastase, was expressed in E.coli.
<b>Species</b>	Human
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Conjugate</b>	GST
<b>Applications</b>	Immunogen, Protein Standard, Cell culture, or Other Cell Biology Applications.
<b>Format</b>	Liquid
<b>Size</b>	100 µg, 500 µg
<b>Buffer</b>	Tris-based buffer, 50% glycerol
<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C to -80°C.

## BACKGROUND

<b>Introduction</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
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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.

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**Keywords**

GE; HLE; HNE; ELA2; NE; PMN-E; SCN1; Neutrophil Elastase; Elastase

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