

Recombinant Human ELANE Protein (28-252), C-Avi and 6×His tagged, Biotin-Labeled

Cat. No. ELANE-17H Lot. No. (See product label)

SPECIFICATION

Product Overview

Recombinant human Elane (Neutrophil Elastase), encompassing amino acids 28-252. The construct contains a C-terminal Avi-Tag™ followed by a His-tag (6×His). The recombinant protein was enzymatically biotinylated using the Avi-Tag™ and affinity purified. HiP™ indicates a high purity protein (≥90% pure) and less than 10% aggregation as measured by gel filtration.

The protein appears as two separate bands in SDS PAGE due to slightly different glycosylation patterns. The identity of the protein has been confirmed by protein sequencing (by Edman degradation) of the N-terminus. Both bands are recognized by an anti-His antibody, indicating that the C-terminus is intact.

Species

Human

Source

HEK293

ProteinLength

28-252

Description

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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.

Form	Aqueous buffer solution
Molecular Mass	27 kDa + glycans
Purity	≥ 90%
Notes	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Storage	At least 6 months at -80 centigrade.
Storage Buffer	8 mM phosphate pH 7.4, 110 mM NaCl, 2.2 mM KCl, 20% glycerol
Shipping	At -80 centigrade
Warning	Avoid freeze/thaw cycles
Conjugation	Biotin

GENE INFORMATION

Gene Name	ELANE elastase, neutrophil expressed [Homo sapiens (human)]
Official Symbol	ELANE

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Synonyms	ELANE; elastase, neutrophil expressed; ELA2, elastase 2, neutrophil; neutrophil elastase; HLE; HNE; leukocyte elastase; medullasin; NE; elastase-2; PMN elastase; elastase 2, neutrophil; human leukocyte elastase; polymorphonuclear elastase; bone marrow serine protease; granulocyte-derived elastase; GE; ELA2; SCN1; PMN-E;
Gene ID	1991
mRNA Refseq	NM_001972
Protein Refseq	NP_001963
MIM	130130
UniProt ID	P08246
SDS-PAGE	4-20% SDS-Page Coomassie Staining 