

Product datasheet for RC210399L3

OriGene Technologies, Inc.

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Neutrophil Elastase (ELANE) (NM_001972) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Neutrophil Elastase (ELANE) (NM 001972) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Neutrophil Elastase

Synonyms: ELA2; GE; HLE; HNE; NE; PMN-E; SCN1

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

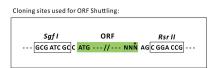
ORF Nucleotide

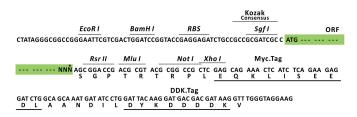
The ORF insert of this clone is exactly the same as(RC210399).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001972

ORF Size: 801 bp



Neutrophil Elastase (ELANE) (NM_001972) Human Tagged Lenti ORF Clone - RC210399L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001972.2</u>

 RefSeq Size:
 938 bp

 RefSeq ORF:
 804 bp

 Locus ID:
 1991

 UniProt ID:
 P08246

Domains: Tryp_SPc

Cytogenetics:

Protein Families: Protease, Transmembrane

Protein Pathways: Systemic lupus erythematosus

19p13.3

MW: 28.5 kDa

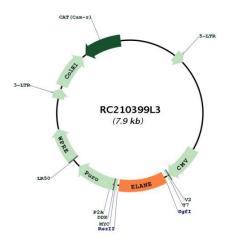
Gene Summary: Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to

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

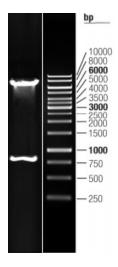
present in a gene cluster on chromosome 19. [provided by RefSeq, Jan 2016]



Product images:



Circular map for RC210399L3



Double digestion of RC210399L3 using Sgfl and Rsrll $\,$