

Product datasheet for TL313237V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Neutrophil Elastase (ELANE) Human shRNA Lentiviral Particle (Locus ID 1991)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Neutrophil Elastase (ELANE) Human shRNA Lentiviral Particle (Locus ID 1991)

Locus ID: 199°

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

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: ELANE - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001972, NM 001972.1, NM 001972.2, NM 001972.3, BC074817, BC074817.2, BC074816,

NM 001972.4

UniProt ID: P08246

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



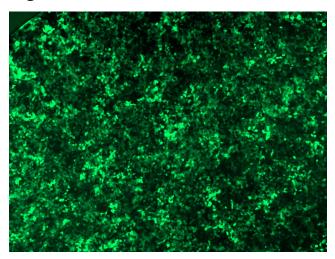


Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

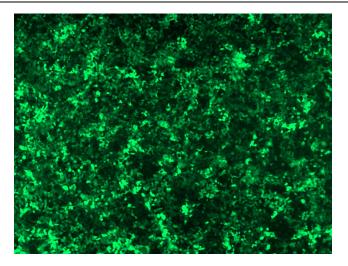
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

Product images:

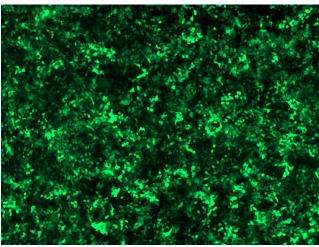


GFP signal was observed under microscope at 48 hours after transduction of TL313237A virus into HEK293 cells. TL313237A virus was prepared using lenti-shRNA TL313237A and [TR30037] packaging kit.

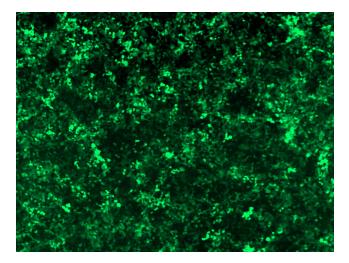




GFP signal was observed under microscope at 48 hours after transduction of TL313237B virus into HEK293 cells. TL313237B virus was prepared using lenti-shRNA TL313237B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL313237C] virus into HEK293 cells. [TL313237C] virus was prepared using lenti-shRNA [TL313237C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL313237D] virus into HEK293 cells. [TL313237D] virus was prepared using lenti-shRNA [TL313237D] and [TR30037] packaging kit.