

Product datasheet for TL312903V

OriGene Technologies, Inc.

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FURIN Human shRNA Lentiviral Particle (Locus ID 5045)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: FURIN Human shRNA Lentiviral Particle (Locus ID 5045)

Locus ID: 5045

Synonyms: FUR; PACE; PCSK3; SPC1

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

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

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

RefSeq: NM 001289823, NM 001289824, NM 002569, NM 002569.1, NM 002569.2, NM 002569.3,

NM 001289823.1, NM 001289824.1, BC012181, BC012181.1, BC008295, BM043834

UniProt ID: P09958

Summary: This gene encodes a member of the subtilisin-like proprotein convertase family, which

includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. It encodes a type 1 membrane bound protease that is expressed in many tissues, including neuroendocrine, liver, gut, and brain. The encoded protein undergoes an initial autocatalytic processing event in the ER and then sorts to the trans-Golgi network through endosomes where a second autocatalytic event takes place and the catalytic activity is acquired. Like other members of this convertase family, the product of this gene specifically cleaves substrates at single or paired basic residues. Some of its substrates include proparathyroid hormone, transforming growth factor beta 1 precursor, proalbumin, pro-beta-secretase, membrane type-1 matrix

 $metallop rotein ase, beta subunit of pro-nerve growth factor and von Willebrand factor. \\ It is$

thought to be one of the proteases responsible for the activation of HIV envelope

glycoproteins gp160 and gp140, and may play a role in tumor progression. Unlike SARS-CoV and other coronaviruses, the spike protein of SARS-CoV-2 is thought to be uniquely cleaved by this protease. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Aug 2020]

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 custom shRNA service.







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).