

# **Product datasheet for TL311438V**

### OriGene Technologies, Inc.

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## MMP7 Human shRNA Lentiviral Particle (Locus ID 4316)

**Product data:** 

**Product Type:** shRNA Lentiviral Particles

**Product Name:** MMP7 Human shRNA Lentiviral Particle (Locus ID 4316)

**Locus ID:** 4316

Synonyms: MMP-7; MPSL1; PUMP-1

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: MMP7 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC003635, NM 002423, NM 002423.2, NM 002423.3, NM 002423.4, BC003635.2,</u>

NM 002423.5

UniProt ID: P09237

Summary: This gene encodes a member of the peptidase M10 family of matrix metalloproteinases

(MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded preproprotein is proteolytically processed to generate the mature protease. This secreted protease breaks down proteoglycans, fibronectin, elastin and casein and differs from most MMP family members in that it lacks a conserved C-terminal hemopexin domain. The enzyme is involved in wound healing, and studies in mice suggest that it regulates the activity of defensins in intestinal mucosa. The gene is part of a cluster of MMP genes on chromosome 11. This gene exhibits elevated expression levels in multiple human cancers. [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>.



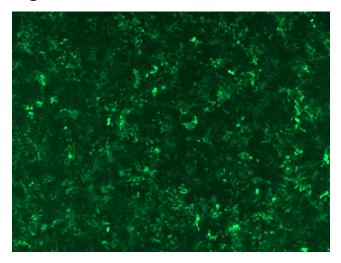


### Performance Guaranteed:

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.

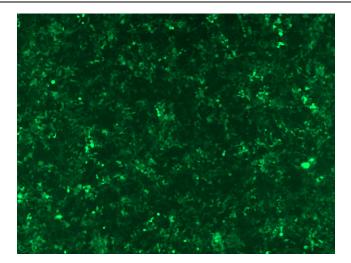
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

## **Product images:**

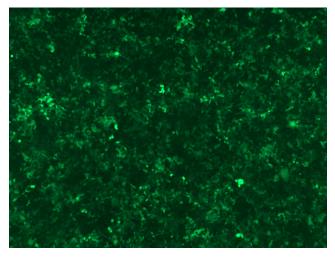


GFP signal was observed under microscope at 48 hours after transduction of TL311438A virus into HEK293 cells. TL311438A virus was prepared using lenti-shRNA TL311438A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of TL311438B virus into HEK293 cells. TL311438B virus was prepared using lenti-shRNA TL311438B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL311438C] virus into HEK293 cells. [TL311438C] virus was prepared using lenti-shRNA [TL311438C] and [TR30037] packaging kit.