

Product datasheet for TL308745

OriGene Technologies, Inc.

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TMPRSS2 Human shRNA Plasmid Kit (Locus ID 7113)

Product data:

Product Type: shRNA Plasmids

Product Name: TMPRSS2 Human shRNA Plasmid Kit (Locus ID 7113)

 Locus ID:
 7113

 Synonyms:
 PRSS10

Vector: pGFP-C-shLenti (TR30023) **E. coli Selection:** Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: TMPRSS2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 7113).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001135099, NM 005656, NM 005656.1, NM 005656.2, NM 005656.3, NM 001135099.1,

BC051839, BC051839.1, BC015819, BC035623, NM 005656.4

UniProt ID: <u>015393</u>

Summary: This gene encodes a protein that belongs to the serine protease family. The encoded protein

contains a type II transmembrane domain, a receptor class A domain, a scavenger receptor cysteine-rich domain and a protease domain. Serine proteases are known to be involved in many physiological and pathological processes. This gene was demonstrated to be upregulated by androgenic hormones in prostate cancer cells and down-regulated in androgen-independent prostate cancer tissue. The protease domain of this protein is thought to be cleaved and secreted into cell media after autocleavage. This protein also facilitates entry of viruses into host cells by proteolytically cleaving and activating viral envelope glycoproteins. Viruses found to use this protein for cell entry include Influenza virus and the human coronaviruses HCoV-229E, MERS-CoV, SARS-CoV and SARS-CoV-2 (COVID-19 virus).

Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Apr 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 <u>custom shRNA service</u>.



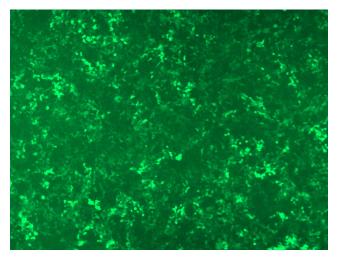


Performance Guaranteed:

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.

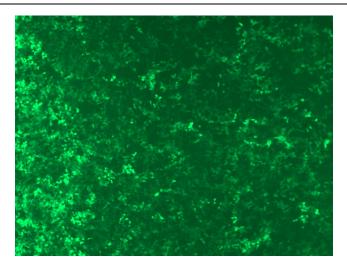
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating 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 TL308745A virus into HEK293 cells. TL308745A virus was prepared using lenti-shRNA TL308745A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of TL308745B virus into HEK293 cells. TL308745B virus was prepared using lenti-shRNA TL308745B and [TR30037] packaging kit.