

## Product datasheet for TR308953

## OriGene Technologies, Inc.

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## SM22 alpha (TAGLN) Human shRNA Plasmid Kit (Locus ID 6876)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** SM22 alpha (TAGLN) Human shRNA Plasmid Kit (Locus ID 6876)

Locus ID:

SM22; SM22-alpha; SMCC; TAGLN1; WS3-10 Synonyms:

pRS (TR20003) Vector:

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

TAGLN - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

6876). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

NM 001001522, NM 003186, NM 001001522.1, NM 003186.1, NM 003186.2, NM 003186.3, RefSeq:

BC004927, BC004927.1, BC010946, BC024296, BC041624, BC065829, BC092415, BC093050,

NM 003186.5, NM 001001522.2

UniProt ID: Q01995

Summary: This gene encodes a shape change and transformation sensitive actin-binding protein which

> belongs to the calponin family. It is ubiquitously expressed in vascular and visceral smooth muscle, and is an early marker of smooth muscle differentiation. The encoded protein is thought to be involved in calcium-independent smooth muscle contraction. It acts as a tumor suppressor, and the loss of its expression is an early event in cell transformation and the development of some tumors, coinciding with cellular plasticity. The encoded protein has a domain architecture consisting of an N-terminal calponin homology (CH) domain and a Cterminal calponin-like (CLIK) domain. Mice with a knockout of the orthologous gene are viable and fertile but their vascular smooth muscle cells exhibit alterations in the distribution of the actin filament and changes in cytoskeletal organization. [provided by RefSeq, Aug 2017]

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

> 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).