

#### OriGene Technologies, Inc.

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# Product datasheet for TR314183

## Caveolin 1 (CAV1) Human shRNA Plasmid Kit (Locus ID 857)

## **Product data:**

Product Type:	shRNA Plasmids
Product Name:	Caveolin 1 (CAV1) Human shRNA Plasmid Kit (Locus ID 857)
Locus ID:	857
Synonyms:	BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CAV1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 857). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 001172895, NM 001172896, NM 001172897, NM 001753, NM 001753.1, NM 001753.2, NM 001753.3, NM 001753.4, NM 001172895.1, NM 001172896.1, NM 001172897.1, BC082246, BC082246.1, BC006432, BC009685, NM 001753.5, NM 001172897.2</u>
UniProt ID:	<u>Q03135</u>
Summary:	The scaffolding protein encoded by this gene is the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 mitogen-activated kinase cascade. Caveolin 1 and caveolin 2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. Mutations in this gene have been associated with Berardinelli-Seip congenital lipodystrophy. Alternatively spliced transcripts encode alpha and beta isoforms of caveolin 1.[provided by RefSeq, Mar 2010]
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> .



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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).

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