

Product datasheet for TL510786V

OriGene Technologies, Inc.

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Smad3 Mouse shRNA Lentiviral Particle (Locus ID 17127)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Smad3 Mouse shRNA Lentiviral Particle (Locus ID 17127)

Locus ID: 17127

Synonyms: AU022421; Madh3

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Smad3 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC066850, NM 016769, NM 016769.1, NM 016769.2, NM 016769.3, NM 016769.4, BC022904,</u>

BC025486

UniProt ID: Q8BUN5

Summary: Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and

transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type

1 receptor kinases. Binds the TRE element in the promoter region of many genes that are

regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates

transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator (By similarity).[UniProtKB/Swiss-

Prot Function]

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).