

# Product datasheet for TL509694

## Smad2 Mouse shRNA Plasmid (Locus ID 17126)

## **Product data:**

#### OriGene Technologies, Inc.

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| Product Type:                | shRNA Plasmids  |
|------------------------------|---|
| Product Name:                | Smad2 Mouse shRNA Plasmid (Locus ID 17126)  |
| Locus ID:                    | 17126   |
| Synonyms:                    | 7120426M23Rik; Madh2; Madr2; mMad2; Smad-2  |
| Vector:                      | pGFP-C-shLenti (TR30023)  |
| E. coli Selection:           | Chloramphenicol (34 ug/ml)  |
| Mammalian Cell<br>Selection: | Puromycin   |
| Format:                      | Lentiviral plasmids   |
| Components:                  | Smad2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 17126).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.  |
| RefSeq:                      | <u>BC021342</u> , <u>BC089184</u> , <u>NM_001252481</u> , <u>NM_001311070</u> , <u>NM_010754</u> , <u>NM_010754.1</u> ,<br><u>NM_010754.2, NM_010754.3, NM_010754.4, NM_001252481.1, BC058713, BM248478</u>   |
| UniProt ID:                  | <u>Q62432</u>   |
| 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 SMAD2/SMAD4 complex, activates transcription. May act as a tumor suppressor in colorectal carcinoma. 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> .   |



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### **GRIGENE** Smad2 Mouse shRNA Plasmid (Locus ID 17126) – TL509694

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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