

## Product datasheet for **TR500179**

### Axin1 Mouse shRNA Plasmid (Locus ID 12005)

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | shRNA Plasmids  |
| Product Name:             | Axin1 Mouse shRNA Plasmid (Locus ID 12005)  |
| Locus ID:                 | 12005   |
| Synonyms:                 | AI316800; Axin; Fu; fused; Kb; Ki; kinky; knobbly   |
| Vector:                   | pRS (TR20003)   |
| E. coli Selection:        | Ampicillin  |
| Mammalian Cell Selection: | Puromycin   |
| Format:                   | Retroviral plasmids   |
| Components:               | Axin1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 12005). 5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.   |
| RefSeq:                   | <a href="#">BC113171</a> , <a href="#">NM_001159598</a> , <a href="#">NM_009733</a> , <a href="#">NM_009733.1</a> , <a href="#">NM_009733.2</a> , <a href="#">NM_001159598.1</a> , <a href="#">BC011544</a> , <a href="#">BC055491</a> , <a href="#">BC069954</a>   |
| UniProt ID:               | <a href="#">O35625</a>  |
| Summary:                  | Component of the beta-catenin destruction complex required for regulating CTNNB1 levels through phosphorylation and ubiquitination, and modulating Wnt-signaling (By similarity). Controls dorsoventral patterning via two opposing effects; down-regulates CTNNB1 to inhibit the Wnt signaling pathway and ventralize embryos, but also dorsalizes embryos by activating a Wnt-independent JNK signaling pathway. In Wnt signaling, probably facilitates the phosphorylation of CTNNB1 and APC by GSK3B. Likely to function as a tumor suppressor. Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation. Enhances TGF-beta signaling by recruiting the RNF111 E3 ubiquitin ligase and promoting the degradation of inhibitory SMAD7 (By similarity). Also component of the AXIN1-HIPK2-TP53 complex which controls cell growth, apoptosis and development.[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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .  |



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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](mailto: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).