

## **Product datasheet for TL311991**

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## **KCTD11 Human shRNA Plasmid Kit (Locus ID 147040)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** KCTD11 Human shRNA Plasmid Kit (Locus ID 147040)

**Locus ID:** 147040

Synonyms: C17orf36; KCASH1; REN; REN/KCTD11

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: KCTD11 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

147040). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** NM 001002914, NM 001002914.1, NM 001002914.2, BC019929, BC019929.1, BC063604,

BC103744, BC110598, NM 001363642

UniProt ID: O693B1

**Summary:** Plays a role as a marker and a regulator of neuronal differentiation; Up-regulated by a variety

of neurogenic signals, such as retinoic acid, epidermal growth factor/EGF and NGFB/nerve growth factor. Induces apoptosis, growth arrest and the expression of cyclin-dependent kinase inhibitor CDKN1B. Plays a role as a tumor repressor and inhibits cell growth and tumorigenicity of medulloblastoma (MDB). Acts as probable substrate-specific adapter for a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex towards HDAC1. Functions as antagonist of the Hedgehog pathway on cell proliferation and differentiation by affecting the nuclear transfer of transcription factor GLI1, thus maintaining cerebellar granule cells in undifferentiated state, this effect probably occurs via HDAC1 down-regulation, keeping GLI1 acetylated and inactive. When knock-down, Hedgehog antagonism is impaired and

proliferation of granule cells is sustained. Activates the caspase cascade.[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).