

## Product datasheet for TL513911

## Rfx3 Mouse shRNA Plasmid (Locus ID 19726)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Rfx3 Mouse shRNA Plasmid (Locus ID 19726)

Locus ID:

Synonyms: C230093O12Rik; MRFX3

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Rfx3 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 19726).

5µg purified plasmid DNA per construct

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

BC017598, NM 001166414, NM 011265, NM 001360357, NM 001360358, NM 011265.1, RefSeq:

NM 011265.2, NM 011265.3, NM 001166414.1, NM 001166414.2

**UniProt ID:** P48381

**Summary:** Transcription factor required for ciliogenesis and islet cell differentiation during endocrine

> pancreas development. Essential for the differentiation of nodal monocilia and left-right asymmetry specification during embryogenesis. Required for the biogenesis of motile cilia by

governing growth and beating efficiency of motile cells (PubMed:15121860, PubMed:19671664). Also required for ciliated ependymal cell differentiation

(PubMed:16930429). Together with RFX6, participates in the differentiation of 4 of the 5 islet cell types during endocrine pancreas development, with the exception of pancreatic PP (polypeptide-producing) cells (PubMed:17229940). Regulates transcription by forming a heterodimer with another RFX protein and binding to the X-box in the promoter of target genes (By similarity). Regulates the expression of genes involved in ciliary assembly

(DYNC2LI1, FOXI1 and BBS4) and genes involved in ciliary motility (DNAH11, DNAH9 and DNAH5). Represses transcription of MAP1A in non-neuronal cells but not in neuronal cells.

[UniProtKB/Swiss-Prot Function]



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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="mailto:custom shRNA service">custom shRNA service</a>.

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).