

Product datasheet for **TR512829**

Ift20 Mouse shRNA Plasmid (Locus ID 55978)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Ift20 Mouse shRNA Plasmid (Locus ID 55978)
Locus ID:	55978
Synonyms:	0610009H04Rik; AU015496; mIFT20
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ift20 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 55978). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC002040 , NM_018854 , NM_018854.1 , NM_018854.2 , NM_018854.3 , NM_018854.4 , NM_018854.5
UniProt ID:	Q61025
Summary:	Part of intraflagellar transport (IFT) particles involved in ciliary process assembly. May play a role in the trafficking of ciliary membrane proteins from the Golgi complex to the cilium (PubMed:16775004). Regulates the ciliary platelet-derived growth factor receptor-alpha (PDGFRA) signaling pathway. Required for protein stability of E3 ubiquitin ligases CBL and CBLB that mediate ubiquitination and internalization of PDGFRA for proper feedback inhibition of PDGFRA signaling (PubMed:29237719). Essential for male fertility. Plays an important role in spermatogenesis, particularly spermiogenesis, when germ cells form flagella. May play a role in the transport of flagellar proteins ODF2 and SPAG16 to build sperm flagella and in the removal of redundant sperm cytoplasm (PubMed:27682589). Also involved in autophagy since it is required for trafficking of ATG16L and the expansion of the autophagic compartment (PubMed:24089209).[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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .


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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).