

# Product datasheet for TR711988

## Rnf138 Rat shRNA Plasmid (Locus ID 94196)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Rnf138 Rat shRNA Plasmid (Locus ID 94196)
Locus ID:	94196
Synonyms:	Rsd4; Trif
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Rnf138 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 94196). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 053588, NM 053588.1, NM 053588.2, BC061821</u>
UniProt ID:	<u>Q99PD2</u>
Summary:	E3 ubiquitin-protein ligase involved in DNA damage response by promoting DNA resection and homologous recombination. Recruited to sites of double-strand breaks following DNA damage and specifically promotes double-strand break repair via homologous recombination. Two different, non-exclusive, mechanisms have been proposed. According to a report, regulates the choice of double-strand break repair by favoring homologous recombination over non-homologous end joining (NHEJ): acts by mediating ubiquitination of XRCC5/Ku80, leading to remove the Ku complex from DNA breaks, thereby promoting homologous recombination. According to another report, cooperates with UBE2Ds E2 ubiquitin ligases (UBE2D1, UBE2D2, UBE2D3 or UBE2D4) to promote homologous recombination by mediating ubiquitination of RBBP8/CtIP. Together with NLK, involved in the ubiquitination and degradation of TCF/LEF. Also exhibits auto-ubiquitination activity in combination with UBE2K. May act as a negative regulator in the Wnt/beta-catenin-mediated signaling pathway.[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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### **CRIGENE** Rnf138 Rat shRNA Plasmid (Locus ID 94196) – TR711988

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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