

Product datasheet for **TF310267**

Oct4 (POU5F1) Human shRNA Plasmid Kit (Locus ID 5460)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Oct4 (POU5F1) Human shRNA Plasmid Kit (Locus ID 5460)
Locus ID:	5460
Synonyms:	Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	POU5F1 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 5460). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	BC020712 , NM_001173531 , NM_001285986 , NM_001285987 , NM_002701 , NM_203289 , NM_002701.1 , NM_002701.2 , NM_002701.3 , NM_002701.4 , NM_002701.5 , NM_203289.1 , NM_203289.2 , NM_203289.3 , NM_203289.4 , NM_203289.5 , NM_001173531.1 , NM_001173531.2 , NM_001285986.1 , NM_001285987.1 , BC117435 , BC069246 , BC117437 , NM_002701.6
UniProt ID:	Q01860
Summary:	This gene encodes a transcription factor containing a POU homeodomain that plays a key role in embryonic development and stem cell pluripotency. Aberrant expression of this gene in adult tissues is associated with tumorigenesis. This gene can participate in a translocation with the Ewing's sarcoma gene on chromosome 21, which also leads to tumor formation. Alternative splicing, as well as usage of alternative AUG and non-AUG translation initiation codons, results in multiple isoforms. One of the AUG start codons is polymorphic in human populations. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12. [provided by RefSeq, Oct 2013]
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).