

Product datasheet for TR310507

PEG3 Human shRNA Plasmid Kit (Locus ID 5178)

Product data:

OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	PEG3 Human shRNA Plasmid Kit (Locus ID 5178)
Locus ID:	5178
Synonyms:	PW1; ZKSCAN22; ZNF904; ZSCAN24
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PEG3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5178). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM 001146184, NM 001146185, NM 001146186, NM 001146187, NM 006210, NM 006210.1, NM 006210.2, NM 001146184.1, NM 001146186.1, NM 001146185.1, NM 001146187.1, BC150272, BC037330, BC052616, BC136268, NM 001369722, NM 001369718, NM 001369720, NM 001369723, NM 001369725, NM 001369728, NM 001369729, NM 001369731, NM 001369732, NM 001369733, NM 001369734, NM 001369738, NR 161475, NR 161476, NM 001369717, NM 001369719, NM 001369721, NM 001369724, NM 001369726, NM 001369727, NM 001369730, NM 001369735, NM 001369736, NM 001369737, NM 001369739, NM 006210.3, NM 001146185.2, NM 001146184.2
UniProt ID:	<u>Q9GZU2</u>



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Summary:	In human, ZIM2 and PEG3 are treated as two distinct genes though they share multiple 5' exons and a common promoter and both genes are paternally expressed (PMID:15203203). Alternative splicing events connect their shared 5' exons either with the remaining 4 exons unique to ZIM2, or with the remaining 2 exons unique to PEG3. In contrast, in other mammals ZIM2 does not undergo imprinting and, in mouse, cow, and likely other mammals as well, the ZIM2 and PEG3 genes do not share exons. Human PEG3 protein belongs to the Kruppel C2H2-type zinc finger protein family. PEG3 may play a role in cell proliferation and p53-mediated apoptosis. PEG3 has also shown tumor suppressor activity and tumorigenesis in glioma and ovarian cells. Alternative splicing of this PEG3 gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2009]
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).

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