

Product datasheet for TR301748

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

SETD7 Human shRNA Plasmid Kit (Locus ID 80854)

Product data:

Product Type: shRNA Plasmids

Product Name: SETD7 Human shRNA Plasmid Kit (Locus ID 80854)

Locus ID: 80854

Synonyms: KMT7; SET7; SET7/9; SET9

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: SETD7 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80854). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 030648, NM 001306199, NM 001306200, NR 131339, NM 030648.1, NM 030648.2,

NM 030648.3, BC012784, BC040990, BC066361, BC110904, BC121055, BC121056, BM922680

UniProt ID: Q8WTS6

Summary: Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4'

methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by

IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also

methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, and

possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing

p53/TP53-mediated transcriptional activation.[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 custom shRNA service.







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).