

Product datasheet for TR303328

MBD5 Human shRNA Plasmid Kit (Locus ID 55777)

Product data:

OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	MBD5 Human shRNA Plasmid Kit (Locus ID 55777)
Locus ID:	55777
Synonyms:	MRD1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MBD5 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 55777). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 018328, NM 018328.1, NM 018328.2, NM 018328.3, NM 018328.4, BC014534, BC150264, NM 018328.5</u>
UniProt ID:	<u>Q9P267</u>
Summary:	This gene encodes a member of the methyl-CpG-binding domain (MBD) family. The MBD consists of about 70 residues and is the minimal region required for a methyl-CpG-binding protein binding specifically to methylated DNA. In addition to the MBD domain, this protein contains a PWWP domain (Pro-Trp-Trp-Pro motif), which consists of 100-150 amino acids and is found in numerous proteins that are involved in cell division, growth and differentiation. Mutations in this gene cause an autosomal dominant type of cognitive disability. The encoded protein interacts with the polycomb repressive complex PR-DUB which catalyzes the deubiquitination of a lysine residue of histone 2A. Haploinsufficiency of this gene is associated with a syndrome involving microcephaly, intellectual disabilities, severe speech impairment, and seizures. Alternatively spliced transcript variants have been found, but their full-length nature is not determined. [provided by RefSeq, Jul 2017]
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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GRIGENE MBD5 Human shRNA Plasmid Kit (Locus ID 55777) – TR303328

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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