

Product datasheet for TG320324

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

DNMT3B Human shRNA Plasmid Kit (Locus ID 1789)

Product data:

Product Type: shRNA Plasmids

Product Name: DNMT3B Human shRNA Plasmid Kit (Locus ID 1789)

Locus ID: 1789

Synonyms: ICF; ICF1; M.HsallIB

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: DNMT3B - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID =

1789). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001207055, NM 001207056, NM 006892, NM 175848, NM 175849, NM 175850,

NM 175848.1, NM 175850.1, NM 175850.2, NM 006892.1, NM 006892.2, NM 006892.3, NM 175849.1, NM 001207056.1, NM 001207055.1, BC111933, BC118502, NM 006892.4,

NM 001207055.2, NM 001207056.2, NM 175848.2, NM 175849.2

UniProt ID: Q9UBC3

Summary: CpG methylation is an epigenetic modification that is important for embryonic development,

imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA

methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than

maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined.

[provided by RefSeq, May 2011]

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).