

Product datasheet for TR312331

OriGene Technologies, Inc.

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HS3ST3B1 Human shRNA Plasmid Kit (Locus ID 9953)

Product data:

Product Type: shRNA Plasmids

Product Name: HS3ST3B1 Human shRNA Plasmid Kit (Locus ID 9953)

Locus ID: 9953

Synonyms: 3-OST-3B; 3OST3B1; h3-OST-3B

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: HS3ST3B1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 9953). 5µg purified plasmid DNA per construct

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

RefSeq: NM 006041, NR 130138, NM 006041.1, NM 006041.2, BC063301, BC063301.1, BC069664,

BC069725, BM968044, NM 006041.3

UniProt ID: Q9Y662

Summary: The protein encoded by this gene is a type II integral membrane protein that belongs to the

3-O-sulfotransferases family. These proteins catalyze the addition of sulfate groups at the 3-OH position of glucosamine in heparan sulfate. The substrate specificity of individual members of the family is based on prior modification of the heparan sulfate chain, thus allowing different members of the family to generate binding sites for different proteins on the same heparan sulfate chain. Following treatment with a histone deacetylase inhibitor, expression of this gene is activated in a pancreatic cell line. The increased expression results in promotion of the epithelial-mesenchymal transition. In addition, the modification catalyzed by this protein allows herpes simplex virus membrane fusion and penetration. A very closely related homolog with an almost identical sulfotransferase domain maps less than 1 Mb away. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

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).