

Product datasheet for TR308487

OriGene Technologies, Inc.

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UNC13B Human shRNA Plasmid Kit (Locus ID 10497)

Product data:

Product Type: shRNA Plasmids

Product Name: UNC13B Human shRNA Plasmid Kit (Locus ID 10497)

Locus ID: 10497

Synonyms: MUNC13; munc13-2; UNC13; Unc13h2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: UNC13B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

10497). 5µg purified plasmid DNA per construct

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

RefSeq: NM 006377, NM 001330653, NM 006377.1, NM 006377.2, NM 006377.3, BC111781,

BC111800, NM 006377.5

UniProt ID: 014795

Summary: This gene is expressed in the kidney cortical epithelial cells and is upregulated by

hyperglycemia. The encoded protein shares a high level of similarity to the rat homolog, and contains 3 C2 domains and a diacylglycerol-binding C1 domain. Hyperglycemia increases the levels of diacylglycerol, which has been shown to induce apoptosis in cells transfected with this gene and thus contribute to the renal cell complications of hyperglycemia. Studies in other species also indicate a role for this protein in the priming step of synaptic vesicle

exocytosis. [provided by RefSeq, Jul 2008]

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).