

Product datasheet for TR308851

OriGene Technologies, Inc.

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TGF beta Receptor II (TGFBR2) Human shRNA Plasmid Kit (Locus ID 7048)

Product data:

Product Type: shRNA Plasmids

Product Name: TGF beta Receptor II (TGFBR2) Human shRNA Plasmid Kit (Locus ID 7048)

Locus ID: 7048

Synonyms: AAT3; FAA3; LDS1B; LDS2; LDS2B; MFS2; RIIC; TAAD2; TBR-ii; TBRII; TGFbeta-RII; TGFR-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: TGFBR2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

7048). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001024847, NM 003242, NM 003242.1, NM 003242.2, NM 003242.3, NM 003242.4,

NM 003242.5, NM 001024847.1, NM 001024847.2, BC040499, BC152840, BM457423,

NM 003242.6

UniProt ID: P37173

Summary: The protein encoded by this gene is a transmembrane protein that has a protein kinase

domain, forms a heterodimeric complex with TGF-beta receptor type-1, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of genes related to cell proliferation, cell cycle arrest, wound healing, immunosuppression, and tumorigenesis. Mutations in this gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding

different isoforms have been characterized. [provided by RefSeq, Aug 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 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).