

Product datasheet for TR308848

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

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

TGIF (TGIF1) Human shRNA Plasmid Kit (Locus ID 7050)

Product data:

Product Type: shRNA Plasmids

Product Name: TGIF (TGIF1) Human shRNA Plasmid Kit (Locus ID 7050)

Locus ID: 7050

HPE4: TGIF Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: TGIF1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

7050). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001278682, NM 001278684, NM 001278686, NM 003244, NM 170695, NM 173207,

> NM 173208, NM 173209, NM 173210, NM 173211, NM 174886, NM 173208.1, NM 173208.2, NM 174886.1, NM 174886.2, NM 003244.1, NM 003244.2, NM 003244.3, NM 173207.1, NM 173207.2, NM 170695.1, NM 170695.2, NM 170695.3, NM 173209.1, NM 173209.2,

NM 173211.1, NM 173210.1, NM 173210.2, NM 001278686.1, NM 001278684.1,

NM 001278682.1, BC000814, BC000814.1, BC031268, BC031268.1, BM849453, NM 173209.3,

NM 003244.4, NM 173208.3, NM 001278682.2, NM 173207.4, NM 001278684.2,

NM 170695.4, NM 173211.2

UniProt ID: Q15583



Summary:

The protein encoded by this gene is a member of the three-amino acid loop extension (TALE) superclass of atypical homeodomains. TALE homeobox proteins are highly conserved transcription regulators. This particular homeodomain binds to a previously characterized retinoid X receptor responsive element from the cellular retinol-binding protein II promoter. In addition to its role in inhibiting 9-cis-retinoic acid-dependent RXR alpha transcription activation of the retinoic acid responsive element, the protein is an active transcriptional corepressor of SMAD2 and may participate in the transmission of nuclear signals during development and in the adult. Mutations in this gene are associated with holoprosencephaly type 4, which is a structural anomaly of the brain. Alternative splicing has been observed at this locus and multiple splice variants encoding distinct isoforms are described. [provided by RefSeq, Jul 2013]

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).