

Product datasheet for TF308556

OriGene Technologies, Inc.

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Twist (TWIST1) Human shRNA Plasmid Kit (Locus ID 7291)

Product data:

Product Type: shRNA Plasmids

Product Name: Twist (TWIST1) Human shRNA Plasmid Kit (Locus ID 7291)

Locus ID: 7291

Synonyms: ACS3; bHLHa38; BPES2; BPES3; CRS; CRS1; CSO; SCS; SWCOS; TWIST

Vector: pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: TWIST1 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 7291).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 000474, NR 149001, NM 000474.1, NM 000474.2, NM 000474.3, BC036704, BC036704.2,

NM 000474.4

UniProt ID: Q15672

Summary: This gene encodes a basic helix-loop-helix (bHLH) transcription factor that plays an important

role in embryonic development. The encoded protein forms both homodimers and heterodimers that bind to DNA E box sequences and regulate the transcription of genes involved in cranial suture closure during skull development. This protein may also regulate

neural tube closure, limb development and brown fat metabolism. This gene is

hypermethylated and overexpressed in multiple human cancers, and the encoded protein promotes tumor cell invasion and metastasis, as well as metastatic recurrence. Mutations in this gene cause Saethre-Chotzen syndrome in human patients, which is characterized by

craniosynostosis, ptosis and hypertelorism. [provided by RefSeq, Jul 2020]

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).