

Product datasheet for TL306520

OriGene Technologies, Inc.

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ATF 4 (ATF4) Human shRNA Plasmid Kit (Locus ID 468)

Product data:

Product Type: shRNA Plasmids

Product Name: ATF 4 (ATF4) Human shRNA Plasmid Kit (Locus ID 468)

Locus ID: 468

Synonyms: CREB-2; CREB2; TAXREB67; TXREB

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: ATF4 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 468). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001675, NM 182810, NM 182810.1, NM 182810.2, NM 001675.1, NM 001675.2,

NM 001675.3, NM 001675.4, BC011994, BC011994.1, BC008090, BC016855, BC022088,

BC024775, BC044895, BC073754, BC073990

UniProt ID: P18848

Summary: This gene encodes a transcription factor that was originally identified as a widely expressed

mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-

response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are

located on the X chromosome at q28 in a region containing a large inverted duplication.

[provided by RefSeq, Sep 2011]

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>.



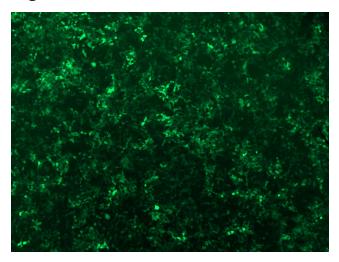


Performance Guaranteed:

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.

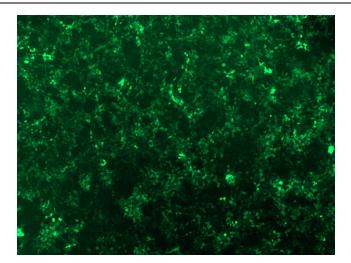
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

Product images:

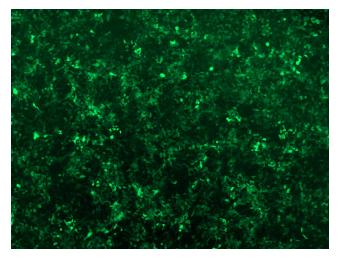


GFP signal was observed under microscope at 48 hours after transduction of TL306520A virus into HEK293 cells. TL306520A virus was prepared using lenti-shRNA TL306520A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL306520C] virus into HEK293 cells. [TL306520C] virus was prepared using lenti-shRNA [TL306520C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL306520D] virus into HEK293 cells. [TL306520D] virus was prepared using lenti-shRNA [TL306520D] and [TR30037] packaging kit.