

### Product datasheet for TL318700V

#### OriGene Technologies, Inc.

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## NFKB1 Human shRNA Lentiviral Particle (Locus ID 4790)

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** NFKB1 Human shRNA Lentiviral Particle (Locus ID 4790)

**Locus ID:** 4790

Synonyms: CVID12; EBP-1; KBF1; NF-kappa-B1; NF-kappaB; NF-kappabeta; NF-kB1; NF-kB1; NF-kappaB;

NFKB-p50; NFKB-p105

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

**Components:** NFKB1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001165412, NM 001319226, NM 003998, NM 003998.1, NM 003998.2, NM 003998.3,

NM 001165412.1, BC051765, BC033210, NM 001165412.2

UniProt ID: P19838

Summary: This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S

proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra-and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent

inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. NFKB is a critical regulator of the immediate-early response to viral infection. Alternative splicing results in multiple transcript variants encoding different isoforms, at least one of

which is proteolytically processed. [provided by RefSeq, Aug 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 <u>custom shRNA service</u>.



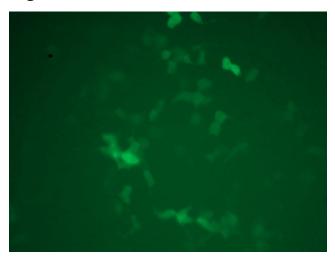


### Performance Guaranteed:

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.

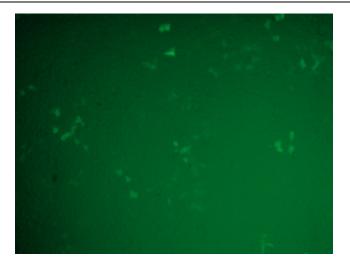
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

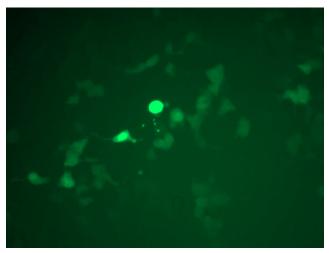


GFP signal was observed under microscope at 48 hours after transduction of TL318700A virus into HEK293 cells. TL318700A virus was prepared using lenti-shRNA TL318700A and [TR30037] packaging kit.

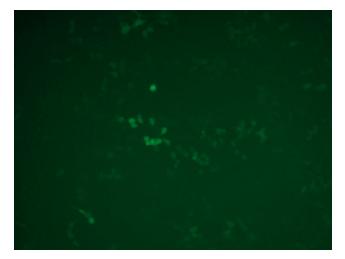




GFP signal was observed under microscope at 48 hours after transduction of TL318700B virus into HEK293 cells. TL318700B virus was prepared using lenti-shRNA TL318700B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL318700C] virus into HEK293 cells. [TL318700C] virus was prepared using lenti-shRNA [TL318700C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL318700D] virus into HEK293 cells. [TL318700D] virus was prepared using lenti-shRNA [TL318700D] and [TR30037] packaging kit.