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Product datasheet for TL309875V

Rel B (RELB) Human shRNA Lentiviral Particle (Locus ID 5971)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	Rel B (RELB) Human shRNA Lentiviral Particle (Locus ID 5971)
Locus ID:	5971
Synonyms:	I-REL; IMD53; IREL; REL-B
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	RELB - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	NM_006509, NM_006509.1, NM_006509.2, NM_006509.3, BC028013, BC028013.1, BM684710, NM_006509.4
UniProt ID:	Q01201

View online »

Summary:

NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processed such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. NF-kappa-B heterodimeric RelB-p50 and RelB-p52 complexes are transcriptional activators. RELB neither associates with DNA nor with RELA/p65 or REL. Stimulates promoter activity in the presence of NFKB2/p49. As a member of the NUPR1/RELB/IER3 survival pathway, may provide pancreatic ductal adenocarcinoma with remarkable resistance to cell stress, such as starvation or gemcitabine treatment. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer in a CRY1/CRY2 independent manner. Increased repression of the heterodimer is seen in the presence of NFKB2/p52. Is required for both T and B lymphocyte maturation and function (PubMed:26385063).[UniProtKB/Swiss-Prot Function]

shRNA Design:

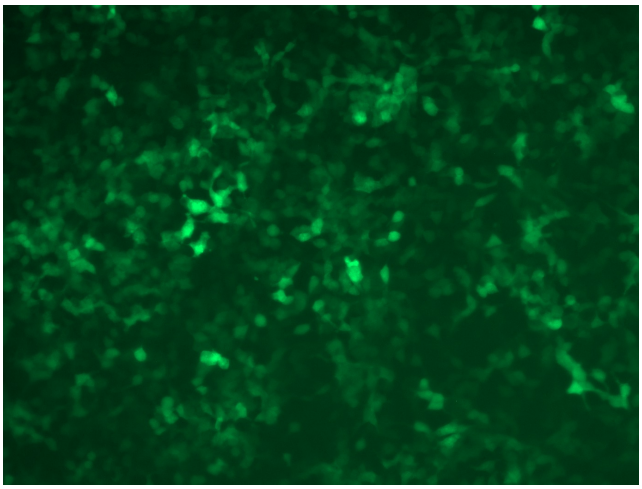
These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed:

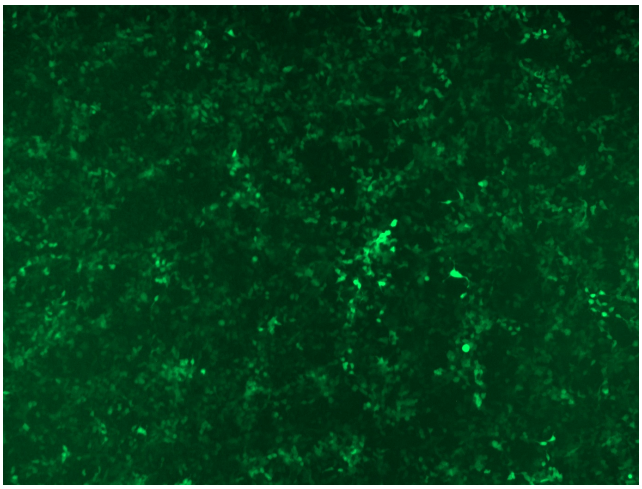
OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. 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).

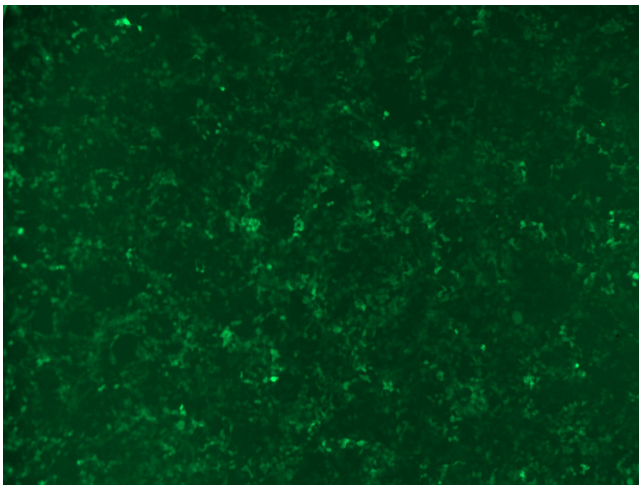
Product images:



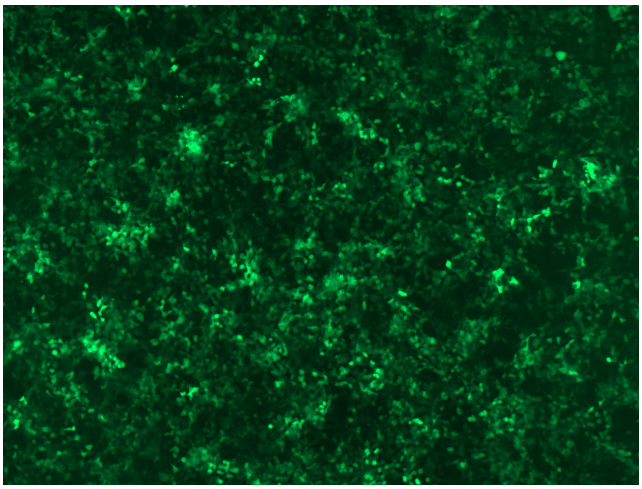
GFP signal was observed under microscope at 48 hours after transduction of TL309875A virus into HEK293 cells. TL309875A virus was prepared using lenti-shRNA TL309875A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL309875B virus into HEK293 cells. TL309875B virus was prepared using lenti-shRNA TL309875B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309875C] virus into HEK293 cells. [TL309875C] virus was prepared using lenti-shRNA [TL309875C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309875D] virus into HEK293 cells. [TL309875D] virus was prepared using lenti-shRNA [TL309875D] and [TR30037] packaging kit.