

Product datasheet for TL513421V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 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

Cul4b Mouse shRNA Lentiviral Particle (Locus ID 72584)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Cul4b Mouse shRNA Lentiviral Particle (Locus ID 72584)

Locus ID: 72584

Synonyms: 2700050M05Rik; AA409770; CUL-4B; mKIAA0695

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Cul4b - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: BC004026, NM 001110142, NM 028288, NM 001110142.1, NM 028288.1, NM 028288.2,

NM 028288.3, NM 028288.4, NM 028288.5, BC010347

UniProt ID: A2A432

Summary: Core component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which

mediate the ubiquitination and subsequent proteasomal degradation of target proteins. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition subunit. CUL4B may act within the complex as a scaffold protein, contributing to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. Plays a role as part of the E3 ubiquitin-protein ligase complex in polyubiquitination of CDT1, histone H2A, histone H3 and histone H4 in response to radiation-induced DNA damage. Targeted to UV damaged chromatin by DDB2 and may be important for DNA repair and DNA replication. Required for ubiquitination of cyclin E, and consequently, normal G1 cell cycle progression. Regulates the mammalian target-of-rapamycin (mTOR) pathway involved in

control of cell growth, size and metabolism. Specific CUL4B regulation of the mTORC1-mediated pathway is dependent upon 26S proteasome function and requires interaction between CUL4B and MLST8 (By similarity). With CUL4A, contributes to ribosome biogenesis

(By similarity).[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



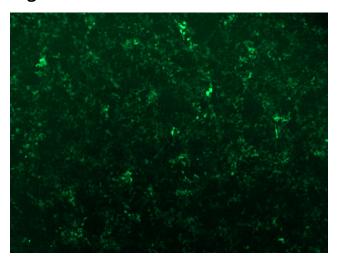


Performance Guaranteed:

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.

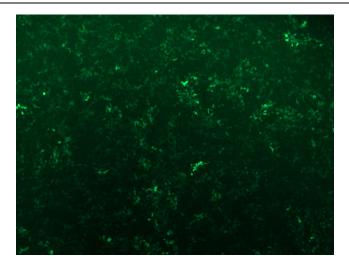
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

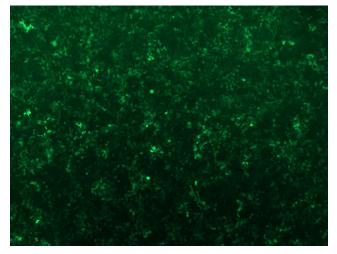


GFP signal was observed under microscope at 48 hours after transduction of TL513421B virus into HEK293 cells. TL513421B virus was prepared using lenti-shRNA TL513421B and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL513421C] virus into HEK293 cells. [TL513421C] virus was prepared using lenti-shRNA [TL513421C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL513421D] virus into HEK293 cells. [TL513421D] virus was prepared using lenti-shRNA [TL513421D] and [TR30037] packaging kit.