

Product datasheet for TR313642

OriGene Technologies, Inc.

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Cullin 2 (CUL2) Human shRNA Plasmid Kit (Locus ID 8453)

Product data:

Product Type: shRNA Plasmids

Product Name: Cullin 2 (CUL2) Human shRNA Plasmid Kit (Locus ID 8453)

Locus ID: 8453

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: CUL2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

8453). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001198777, NM 001198778, NM 001198779, NM 001324375, NM 001324376,

NM 003591, NM 003591.1, NM 003591.2, NM 003591.3, NM 001198779.1, NM 001198778.1,

NM 001198777.1, BC009591, BC009591.1, BC095405, BC110901, NM 001198778.2,

NM 003591.4, NM 001198777.2

UniProt ID: Q13617

Summary: Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3

ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins. ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). May serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin

subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1. The functional specificity of the ECS complex depends on the substrate

recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor

(HIF).[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 <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).