

## **Product datasheet for TR301920**

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## RP1L1 Human shRNA Plasmid Kit (Locus ID 94137)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** RP1L1 Human shRNA Plasmid Kit (Locus ID 94137)

**Locus ID:** 94137

Synonyms: DCDC4B; OCMD; RP88

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: RP1L1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

94137). 5µg purified plasmid DNA per construct

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

RefSeq: NM 178857, NM 178857.1, NM 178857.2, NM 178857.3, NM 178857.4, NM 178857.5

UniProt ID: Q8IWN7

**Summary:** This gene encodes a member of the doublecortin family. The protein encoded by this gene

contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, and two C-terminal large repetitive regions, both of which contain a high percentage of glutamine and glutamic acid residues. This protein is a retinal-specific protein. Its exact length varies among individuals due to the presence of a 16aa repeat in the first C-terminal repetitive region. The 16aa repeat is encoded by the highly polymorphic 48-bp repeat, and 1-6 copies of the 16aa repeat have been identified in normal individuals. The current reference sequence shown here has a single copy of the 16aa repeat.

This protein and the RP1 protein, another retinal-specific protein, play essential and synergistic roles in affecting photosensitivity and outer segment morphogenesis of rod photoreceptors. Mutations in this gene cause occult macular dystrophy (OMD). [provided by

RefSeq, Sep 2010]

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).