

Product datasheet for TG302085

OriGene Technologies, Inc.

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p107 (RBL1) Human shRNA Plasmid Kit (Locus ID 5933)

Product data:

Product Type: shRNA Plasmids

Product Name: p107 (RBL1) Human shRNA Plasmid Kit (Locus ID 5933)

Locus ID: 5933

Synonyms: CP107; p107; PRB1

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: RBL1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5933).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 002895, NM 183404, NM 001323281, NM 001323282, NM 183404.1, NM 183404.2,

NM 183404.3, NM 002895.1, NM 002895.2, NM 002895.3, NM 002895.4, BC032247,

NM 183404.4, NM 002895.5

UniProt ID: P28749

Summary: The protein encoded by this gene is similar in sequence and possibly function to the product

of the retinoblastoma 1 (RB1) gene. The RB1 gene product is a tumor suppressor protein that appears to be involved in cell cycle regulation, as it is phosphorylated in the S to M phase transition and is dephosphorylated in the G1 phase of the cell cycle. Both the RB1 protein and the product of this gene can form a complex with adenovirus E1A protein and SV40 large T-antigen, with the SV40 large T-antigen binding only to the unphosphorylated form of each protein. In addition, both proteins can inhibit the transcription of cell cycle genes containing E2F binding sites in their promoters. Due to the sequence and biochemical similarities with the RB1 protein, it is thought that the protein encoded by this gene may also be a tumor suppressor. Two transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jul 2008]

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).