

## Product datasheet for **TR509206**

### **Rb1cc1 Mouse shRNA Plasmid (Locus ID 12421)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Rb1cc1 Mouse shRNA Plasmid (Locus ID 12421)
<b>Locus ID:</b>	12421
<b>Synonyms:</b>	2900055E04Rik; 5930404L04Rik; Cc1; FIP200; LaXp180
<b>Vector:</b>	pRS (TR20003)
<b>E. coli Selection:</b>	Ampicillin
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	Rb1cc1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 12421). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
<b>RefSeq:</b>	<a href="#">NM_009826</a> , <a href="#">NM_009826.1</a> , <a href="#">NM_009826.2</a> , <a href="#">NM_009826.3</a> , <a href="#">NM_009826.4</a> , <a href="#">BC150774</a> , <a href="#">BC012669</a> , <a href="#">BC066152</a>
<b>UniProt ID:</b>	<a href="#">Q9ESK9</a>
<b>Summary:</b>	Involved in autophagy (PubMed:23262492, PubMed:19258318). Regulates early events but also late events of autophagosome formation through direct interaction with Atg16L1 (PubMed:23392225, PubMed:23285000, PubMed:19258318). Required for the formation of the autophagosome-like double-membrane structure that surrounds the Salmonella-containing vacuole (SCV) during S.typhimurium infection and subsequent xenophagy (PubMed:21525242). Involved in repair of DNA damage caused by ionizing radiation, which subsequently improves cell survival by decreasing apoptosis (PubMed:21807966). Inhibits PTK2/FAK1 and PTK2B/PYK2 kinase activity, affecting their downstream signaling pathways (By similarity). Plays a role as a modulator of TGF-beta-signaling by restricting substrate specificity of RNF111 (PubMed:21795712). Functions as a DNA-binding transcription factor (PubMed:12095676). Is a potent regulator of the RB1 pathway through induction of RB1 expression (PubMed:15968549). Plays a crucial role in muscular differentiation (PubMed:15968549). Plays an indispensable role in fetal hematopoiesis and in the regulation of neuronal homeostasis (PubMed:19940130, PubMed:21088496).[UniProtKB/Swiss-Prot Function]



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**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](mailto: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](mailto: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).