

Product datasheet for **MG216914**

Rb1cc1 (NM_009826) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rb1cc1 (NM_009826) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rb1cc1
Synonyms:	2900055E04Rik; 5930404L04Rik; Cc1; FIP200; LaXp180
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216914 representing NM_009826 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGAAGTTATATGTGTTTCTGGTTAACACCGGAACACGCTGACATTTGACACTGAGCTAACTGTGCAAA
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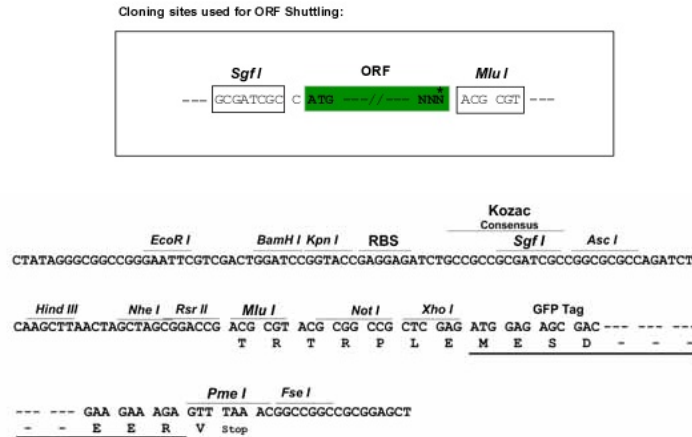
Protein Sequence: >MG216914 representing NM_009826
 Red=Cloning site Green=Tags(s)

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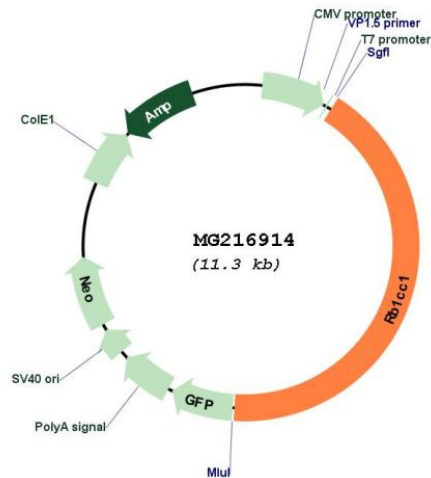
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009826

ORF Size: 4764 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_009826.4](#), [NP_033956.2](#)

RefSeq Size: 7046 bp

RefSeq ORF: 4767 bp

Locus ID: 12421

UniProt ID: [Q9ESK9](#)

Cytogenetics: 1 A1

Gene Summary: 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]