

## Product datasheet for **RG235413**

### Ryanodine Receptor 3 (RYR3) (NM\_001243996) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ryanodine Receptor 3 (RYR3) (NM_001243996) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RYR3
Synonyms:	RYR-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235413 representing NM_001243996 Red=Cloning site Blue=ORF Green=Tags(s)

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AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG235413 representing NM\_001243996

Red=Cloning site Green=Tags(s)

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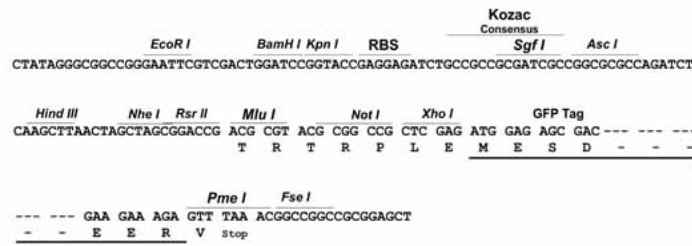
SGPTRRRLE - GFP Tag - V

Restriction Sites:

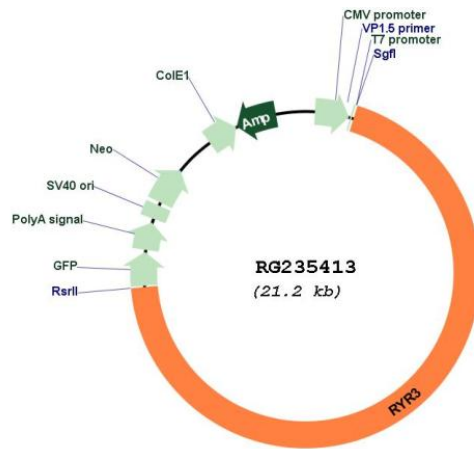
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN:

NM\_001243996

ORF Size:

14595 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001243996.3</a>
<b>RefSeq Size:</b>	15548 bp
<b>RefSeq ORF:</b>	14598 bp
<b>Locus ID:</b>	6263
<b>UniProt ID:</b>	<a href="#">Q15413</a>
<b>Cytogenetics:</b>	15q13.3-q14
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Alzheimer's disease, Calcium signaling pathway
<b>Gene Summary:</b>	The protein encoded by this gene is a ryanodine receptor, which functions to release calcium from intracellular storage for use in many cellular processes. For example, the encoded protein is involved in skeletal muscle contraction by releasing calcium from the sarcoplasmic reticulum followed by depolarization of T-tubules. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]