

## Product datasheet for **RG210034**

### **ORAI1 (NM\_032790) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ORAI1 (NM\_032790) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** ORAI1  
**Synonyms:** CRACM1; IMD9; ORAT1; TAM2; TMEM142A  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210034 representing NM\_032790  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCATCCGGAGCCCGCCCGCCCGAGCCGCAGCAGTCCCGAGCTTCCCCAAGCGGCGGCAGCACCA  
 CCAGCGGCAGCCCGGAGCCCGCCCGCCGAGCGGGGACGGGGAGCCCGGGGGCCCGCCACCGCCGCG  
 GTCCGCCGTACCTACCCGGACTGGATCGGCCAGAGTTACTCCGAGGTGATGAGCCTCAACGAGCACTCC  
 ATGCAGGCGCTGTCTGGCGAAGCTCTACTTGAGCCGCGCCAAGCTTAAAGCCTCCAGCCGGACCTCGG  
 CTCTGCTCTCCGGCTTCGCCATGGTGGCAATGGTGGAGGTGCAGCTGGACGCTGACCACGACTACCCACC  
 GGGGCTGCTCATCGCCTTCAGTGCCTGCACCACAGTGTGGTGGCTGTGCACCTGTTTGGCTCATGATC  
 AGCACCTGCATCCTGCCAACATCGAGGCGGTGAGCAACGTGCACAATCTCAACTCGGTCAAGGAGTCCC  
 CCCATGAGCGCATGCACCGCCACATCGAGCTGGCCTGGGCCTTCTCCACCGTTCATCGGCACGCTGTCTT  
 CCTAGCTGAGGTGGTGTCTGCTGCTGGGTCAAGTTCTTGCCCTCAAGAAGCAGCCAGGCCAGCCAAGG  
 CCCACCAGCAAGCCCCCGCCAGTGGCGCAGCAGCCAACGTGAGCAGCAGCGGCATACCCCGGGCCAGG  
 CAGCTGCCATCGCCTCGACCACCATCATGGTGCCTTCGGCTGATCTTTATCGTCTTCGCCGTCCACTT  
 CTACCGCTCACTGGTTAGCCATAAGACCACCGACAGTTCAGGAGCTCAACGAGCTGGCGGAGTTTGCC  
 CGCTTACAGGACCAGCTGGACCACAGAGGGGACCACCCCTGACGCCCGGCAGCCACTATGCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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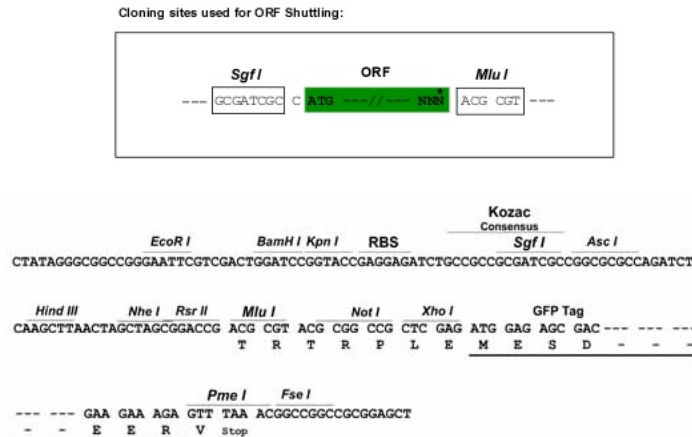
**Protein Sequence:** >RG210034 representing NM\_032790  
 Red=Cloning site Green=Tags(s)

MHPEPAPPPSRSSPELPPSGGSTTSGRRSRRRSGDGEPPGAPPPPPSAVTYPDWIGQSYSEVMSLNEHS  
 MQALSWRKLYLSRAKLKASSRTSALLSGFAMVAMVEVQLDADHDYPPGLLIASFACCTTVLVAVHLFALMI  
 STCILPNIEAVSNVHNLNSVKESPHERMHRHIELAWAFSTVIGTLLFLAEVLLCWVKFLPLKKQPGQPR  
 PTSKPPASGAAANVSTSGITPGQAAAIASSTIMVPFGLIFIVFAVHFYRSLVSHKTDQRQELNELAEFA  
 RLQDQLDHRGDHPLTPGSHYA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_032790

**ORF Size:** 903 bp

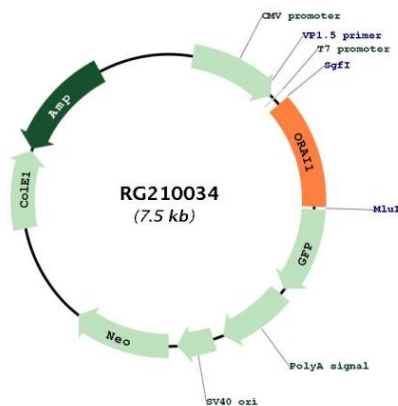
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<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>	<u>NM_032790.2, NP_116179.2</u>
<b>RefSeq Size:</b>	1497 bp
<b>RefSeq ORF:</b>	906 bp
<b>Locus ID:</b>	84876
<b>UniProt ID:</b>	<u>Q96D31</u>
<b>Cytogenetics:</b>	12q24.31
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	The protein encoded by this gene is a membrane calcium channel subunit that is activated by the calcium sensor STIM1 when calcium stores are depleted. This type of channel is the primary way for calcium influx into T-cells. Defects in this gene are a cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 1 (IDTICED1). [provided by RefSeq, Sep 2011]

**Product images:**



Circular map for RG210034