

## Product datasheet for MC212201

### Orai1 (NM\_175423) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Orai1 (NM\_175423) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Orai1  
**Synonyms:** D730049H07Rik; orai-1; Tmem142a  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC212201 representing NM\_175423  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGCATCCGGAGCCTGCCCGCCCCGAGTCACAGCAATCCGGAGCTTCCCGTGAGCGGGCCGAGCAGCA  
CTAGCGGCAGCCCGGAGCCCGCCGCGCAGCGGGGACGGGAGCCCTCGGGGGCCCCACCCTGCCGCC  
GCCGCCACCCCGCTCAGCTACCCGACTGGATCGGCCAGAGTTACTCCGAGGTGATGAGCCTCAACGAG  
CACTCGATGCAGGCGCTGTCTGGCGCAAGCTCTACTTAAGCCGCGCCAAGCTCAAAGCTCCAGCCGGA  
CCTCGGCTCTGCTCTCCGGCTTCGCCATGGTAGCGATGGTGAAGTCCAGCTGGACACAGACCATGACTA  
CCCACCAGGGTTGCTCATCGTCTTTAGTGCCTGCACCACAGTGCTAGTGGCCGTGCACCTGTTTGCCTC  
ATGATCAGCACCTGCATCCTGCCAACATCGAGGCTGTGAGCAACGTCCACAACCTCAACTCGGTCAAAG  
AGTCACCCACGAGCGCATGCATCGCCACATCGAGCTGGCCTGGCCTTCTCCACGGTATCGGGACGCT  
GCTTTTCTAGCAGAGGTCGTGCTGTCTGCTGGTCAAGTCTTACCTCTAAGAGGCAAGCGGGACAG  
CCAAGCCCCACCAAGCTCCCGCTGAATCAGTCATCGTCGCCAACACAGCGACAGCAGCGGCATCACCC  
CGGGTGAGGCGGCAGCCATTGCCTCCACCGCCATCATGGTTCCTGTGGCCTGGTTTTATCGTCTTGGC  
TGTTCACTTCTACCGCTCCCTGGTCAGCCATAAGACGGACCGGCAGTTCAGGAGCTCAATGAGCTGGCC  
GAGTTTGGCCGCTTGACAGGACCAGCTGGACCACAGAGGGGACCATTCTCTAACACCGGGCACCCACTATG  
CCTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_175423  
**Insert Size:** 915 bp



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**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](#)

**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\\_175423.3](#), [NP\\_780632.1](#)

**RefSeq Size:** 1871 bp

**RefSeq ORF:** 915 bp

**Locus ID:** 109305

**UniProt ID:** [Q8BWG9](#)

**Cytogenetics:** 5 F

**Gene Summary:** Ca(2+) release-activated Ca(2+) (CRAC) channel subunit which mediates Ca(2+) influx following depletion of intracellular Ca(2+) stores and channel activation by the Ca(2+) sensor, STIM1. CRAC channels are the main pathway for Ca(2+) influx in T-cells and promote the immune response to pathogens by activating the transcription factor NFAT.[UniProtKB/Swiss-Prot Function]