

## Specifications:

|                |                  |
|----------------|------------------|
| Gene:          | mORAI1           |
| Accession:     | NP_780632        |
| Insert size:   | 928bp            |
| Concentration: | 10µg at 0.2µg/µL |

## mORAI1 cDNA Plasmid

**Orai1 ORAI calcium release-activated calcium modulator 1**  
[ *Mus musculus* (house mouse) ]

**Also known as:** orai-1; Tmem142a

### Summary:

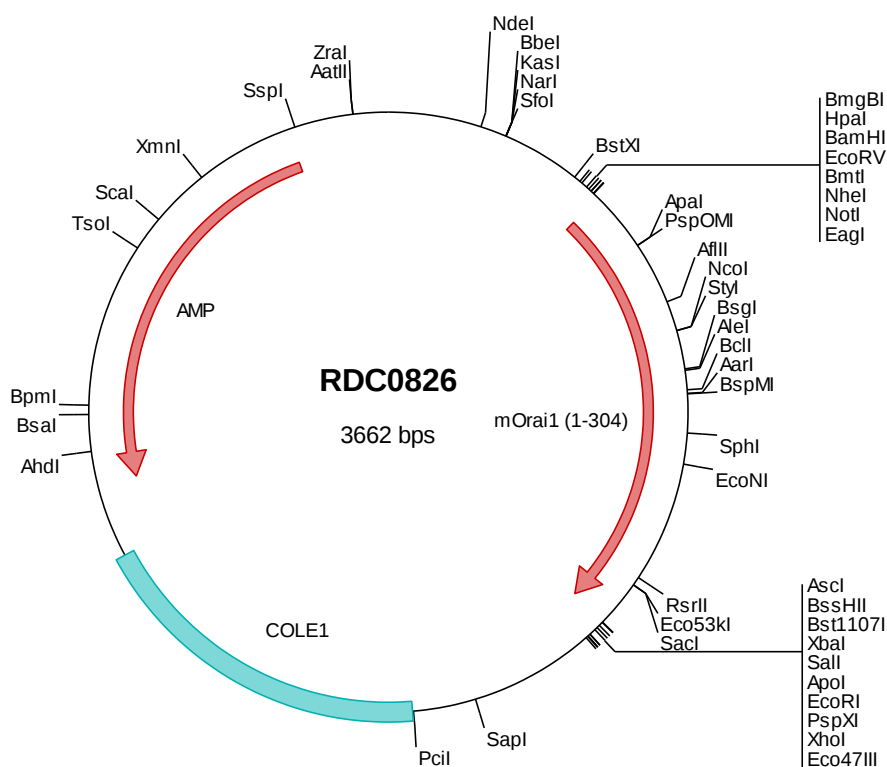
ORAI1 is the pore-forming subunit that is crucial for Ca<sup>2+</sup>(+) entry and Ca<sup>2+</sup>(+) release-activated Ca<sup>2+</sup>(+) channel activities. It is involved in the function but not in the differentiation of osteoblasts and plays a critical role in bone homeostasis by regulating both osteoblasts and osteoclasts.

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

|             |                                                                     |
|-------------|---------------------------------------------------------------------|
| Formulation | cDNA is provided in 10 mM Tris-Cl, pH 8.5                           |
| Shipping    | Ships at ambient temperature                                        |
| Stability   | 1 year from date of receipt when stored at -20°C to -80°C           |
| Storage     | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. |





## > RDC0826 Plasmid DNA Sequence

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1   tcgcgcggtt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcaggggcgc tcagcgggtg ttggcgggtg tcggggctgg cttactatg cggcatcaga gcagattgta ctgagagtgc accatattgc gtgtgaaata
201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aaggcgcatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgccagggt tttccagtc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgcatccgg agcctgcccc gcccgcgagt cacagcaatc cggagcttcc
501  cgtgagcggc ggcagcaaca ctagcggcag ccgcgggagc cgccgccgca ggggggacgg ggagccctcg ggggccccac cgtgcgcgc gccgccaccc
601  gccgtaagct acccggactg gatogggcag agttactccg aggtgatgag cctcaacag cactcgatgc aggcgctgtc ctggcgcaag ctctacttaa
701  gccgcgcaaa gctcaaaagt tcacgcggga cctcggtctc gctctccggc ttccgcatgg tagcgatggt ggaagtccag ctggacacag accatgacta
801  cccaccaggg ttgctcactg tctttagtgc ctgacccaca gtgctagtgg ccgtgcacct gtttgccctc atgatoagca cctgcactcc gcccaacatc
901  gaggtgtgga gcaacgtcca caacctcaac tcggtcaaaag agtcacccca cgagcgcatg catcgccaca tcgagctggc ctgggcccctc tcacagggtca
1001  tcgggagcgt gcttttctca gcagaggtcg tgcgtctctg ctgggtcaag ttcttacctc tcaagaggga agcgggacag ccaagcccca ccaagcctcc
1101  cgctgaatca gtcactcgta ccaaccacag cgacagcagc ggcatacccc cgggtgaggg gccagccatt gcctccacgg ccatcatggt tccctgtggc
1201  ctggttttta tcgtcttctg tgttcaactc taacctcccc tggtcagcca taagacggac cggcagttcc aggagctcaa tgagctggcc gagtttggcc
1301  gcttgcagga ccagctggac cacagagggg accattctct aacacccggc acccactatg cctaaaggcg cgccagataa ctctagagtc gacacccggg
1401  gaattcctcg agcgtctgct tctagcttgg cgtaatcatg gtcatagctg ttctctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc
1501  cggaagcata aagtgtaaag cctgggggtgc ctaatgagtg agctaactca cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaacctgtcg
1601  tgccagctgc attaatgaat cggccaacgc gcggggagag gcggtttgcg tattggggcg tcttcgctct cctcgctcac tgactcgctg cgctcggctg
1701  ttccgctgcg gcgagcggta tcagctcact caaaggcggt aatacggtta tccacagaat caggggataa cgcaggaag aacatgtgag caaaaggcca
1801  gcaaaaggcc aggaacgcta aaaaggccgc gttgtctgcg tttttccata ggctccgcc cctgacagag catcacaaaa atcgacgctc aagtcagagg
1901  tggcgaaaacc cgacaggact ataaagatac caggcgcttc cccctggaag ctccctcgct cgctctctcg ttccgacctc gccgcttacc ggatacctgt
2001  ccgctttctc ccttcgggga agcgtggcgc tttctcaatg ctcacgctgt aggtatctca gttcggtgta ggtcgttcgc tccaagctgg gctgtgtgca
2101  cgaaccccc gttcagcccg accgctgcgc cttatccggt aactatcgtc ttgagtcaca cccggtaaag caccacttat cgccactggc agcagccact
2201  ggtaacagga tttagcagagc gaggtatgta ggcggtgcta cagagttctt gaagtgtgtg tccggcaaac aaccaccgc tggtagcggt ggtttttttg tttgcaagca
2301  gcgctctgct gaagccagtt accttcggaa aaagagttgg tagctcttga tccggcaaac aaccaccgc tggtagcggt ggtttttttg tttgcaagca
2401  gcagattacg cgcagaaaaa aaggatctca agaagatcct ttgactcttt ctacggggtc tgacgctcag tggaacgaaa actcaogtta agggattttg
2501  gtcattgagat tatcaaaaag gatcttcacc tagatccttt taaattaaaa atgaagtttt aaatcaatct aaagtatata tgagtaaaact tggctgtgaca
2601  gttaccaatg cttaatcagt gaggcaccta tctcagcgat ctgtctatct cgttcatcca tagttgcctg actccccgtc gtgtagataa ctacgatacg
2701  ggagggttta ccatctggcc ccagtgtctg aatgataccg cgagaccac gctcaccgca tccagattta tcagcaataa accagccagc cgggaaggcc
2801  gagcgcaaaa gtggtctctg aactttatcc gcctccatcc agtctattaa ttgttgccgg gaagctagag taagtagttc gccagttaat agtttgcgca
2901  acgttgttgc cattgctaca ggcacgtggt tgtcacgctc gtcgttttgg atggcttcat tcagctccgg ttcccaacga tcaaggcgag ttacatgac
3001  cccatgtttg tgcaaaaaag cggttagctc cttcggtcct ccgacgtgtg tcagaagtaa gttggccgca gtgttatcac tcatggttat ggcagactg
3101  cataattctc ttactgtcat gccatccgta agatgctttt ctgtgactgg tgagtactca accaagtcac tctgagaata gtgtatgagg cgaccgagtt
3201  gctcttgcgc ggcgtcaata cgggataata ccgcgccaca tagcagaact ttaaaagtgc tcatcattgg aaaacgttct tcggggcgaa aactctcaag
3301  gatcttaccc ctgttgagat ccagttcgat gtaacccact cgtgcaccca actgatcttc agcatctttt actttoacca gcgtttcttg gtgagcaaaa
3401  acaggaaggc aaaatgccgc aaaaaaggga ataaggcgca cacggaatg ttgaatactc atactcttc tttttcaata ttattgaagc atttatcagg
3501  gttattgtct catgagcgga tacatatattg aatgtattta gaaaaataaa caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtcta
3601  agaaaccatt attatcatga cattaaccta taataatagg cgtatcacga ggcctttctg tc

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## > RDC0826 Translated Insert Sequence

```

1   mhpepappps hsnpelpvsg gsstsgsrrs rrrsgdgeps gapplppppp avsydpdwigq sysevmslne hsmqalswrk lylsraklka ssrtsallsg
101  famvamvevq ldtddhyppg llivfsactt vlvavhlfal mistcilpni eavsnvnhln svkespherm hrhielawaf stvigtl1lf1 aevvllcwwk
201  flplkrqagq psptkppaes vivanhsdss gitpgeaaai astaimvpcg lvfivfavhf yrslvshktd rqqelnela efarlqddld hrgdhs1tpg
301  thya

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