

Product datasheet for MR227257

Orai1 (NM_175423) Mouse Tagged ORF Clone

Product data:

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|---------------------------|-----------------------------------------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | Orai1 (NM_175423) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Orai1 |
| Synonyms: | D730049H07Rik; orai-1; Tmem142a |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >MR227257 representing NM_175423 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCATCCGGAGCCTGCCCGCCCCGAGTCACAGCAATCCGGAGCTTCCCGTGAGCGGGCAGCAGCA
CTAGCGGCAGCCCGGAGCCCGCCGCGCAGCGGGGACGGGAGCCCTCGGGGGCCCCACCGCTGCCGCG
GCCGCCACCCGCCGTAGCTACCCGACTGGATCGGCCAGAGTTACTCCGAGGTGATGAGCCTCAACGAG
CACTCGATGCAGGCGCTGCTCTGGCGAAGCTCTACTTAAGCCGCGCCAAGCTCAAAGCTTCCAGCCGGA
CCTCGGCTCTGCTCTCCGGCTTCGCCATGGTAGCGATGGTGAAGTCCAGCTGGACACAGACCATGACTA
CCACCAGGGTTGCTCATCGTCTTTAGTGCCTGCACCACAGTGTAGTGGCCGTGCACCTGTTGCCCTC
ATGATCAGCACCTGCATCCTGCCAACATCGAGGCTGTGAGCAACGTCCACAACCTCAACTCGGTCAAAG
AGTCACCCACGAGCGCATGCATCGCCACATCGAGCTGGCCTGGGCTTCTCCACGGTATCGGGACGCT
GCTTTTCTAGCAGAGGTCGTGCTGCTCTGCTGGGTCAAGTTCTTACCTCTCAAGAGGCAAGCGGGACAG
CCAAGCCCCACCAAGCCTCCCGCTGAATCAGTCATCGTCGCCAACACAGCGACAGCAGCGGCATCACCC
CGGGTGAAGCGGCAGCCATTGCCCTCCACCGCCATCATGGTTCCCTGTGGCCTGGTTTTATCGTCTTTGC
TGTTCACTTCTACCGCTCCCTGGTCAGCCATAAGACGGACCGGAGTTCAGGAGCTCAATGAGCTGGCC
GAGTTTGGCCGCTTGACGAGCAGCTGGACCACAGAGGGGACCATCTCTAACACCGGGCACCCACTATG
CC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227257 representing NM_175423
Red=Cloning site Green=Tags(s)

MHPEPAPPPSHSNPELPVSGGSSTSGSRRSRRRSGDGEPSGAPLPPPPPAVSPDWIGQSYSEVMSLNE
 HSMQALSWRKL YL SRAK LKASSRTS ALL SGF AMVAMVEVQLD TDHDYPPGLL I VFSACTTVL VAVHL FAL
 MISTCILPNIEAVSNVHNLNSVKESPHERMHRHIELAWAFSTVIGTLLFLAEVLLCWVKFLPLKRQAGQ
 PSPTKPPAESVIVANHSDSSGITPGEAAAIASTAIMVPCGLV FIVFAVHFYRSLVSHKTRDQFQELNELA
 EFARLQDQLDHRGDHSLTPGTHYA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1969_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_175423

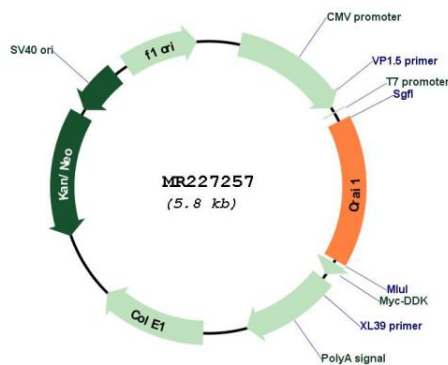
ORF Size: 912 bp

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 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](#)

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| 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: | <ol style="list-style-type: none"> 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: | <u>NM_175423.3, NP_780632.1</u> |
| RefSeq Size: | 1871 bp |
| RefSeq ORF: | 915 bp |
| Locus ID: | 109305 |
| UniProt ID: | <u>Q8BWG9</u> |
| Cytogenetics: | 5 F |
| MW: | 33.5 kDa |
| 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] |

Product images:



Circular map for MR227257