

Product datasheet for **MG227257**

Orai1 (NM_175423) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Orai1 (NM_175423) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Orai1
Synonyms: D730049H07Rik; orai-1; Tmem142a
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227257 representing NM_175423
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCATCCGGAGCCTGCCCCGCCCCGAGTCACAGCAATCCGGAGCTTCCCGTGAGCGGGCAGCAGCA
 CTAGCGGCAGCCCGGAGCCCGCCGCGCAGCGGGGACGGGAGCCCTCGGGGGCCCCACCGCTGCCGCG
 GCCGCCACCCGCCGTGAGTACCCGGACTGGATCGGCCAGAGTTACTCCGAGGTGATGAGCCTCAACGAG
 CACTCGATGCAGGCGCTGCTCTGGCGAAGCTCTACTTAAGCCGCGCCAAGCTCAAAGCTTCCAGCCGGA
 CCTCGGCTCTGCTCTCCGGCTTCGCCATGGTAGCGATGGTGAAGTCCAGCTGGACACAGACCATGACTA
 CCCACCAGGGTTGCTCATCGTCTTTAGTGCCTGCACCACAGTGTAGTGGCCGTGCACCTGTTTGCCTC
 ATGATCAGCACCTGCATCCTGCCAACATCGAGGCTGTGAGCAACGTCCACAACCTCAACTCGGTCAAAG
 AGTCACCCACGAGCGCATGCATCGCCACATCGAGCTGGCCTGGGCTTCTCCACGGTCAATCGGGACGCT
 GCTTTTCTAGCAGAGGTCGTGCTGCTCTGCTGGGTCAAGTTCTTACCTCTCAAGAGGCAAGCGGGACAG
 CCAAGCCCCACCAAGCCTCCCGTGAATCAGTCATCGTCGCCAACACAGCGACAGCAGCGGCATCACCC
 CGGGTGAAGCGGCAGCCATTGCCTCCACCGCCATCATGTTCCCTGTGGCCTGGTTTTTATCGTCTTTGC
 TGTTCACTTCTACCGCTCCCTGGTCAGCCATAAGACGGACCGGAGTTCCAGGAGCTCAATGAGCTGGCC
 GAGTTTGCCCGCTTGACGAGCAGCTGGACCACAGAGGGGACCATCTCTAACACCGGGCACCCACTATG
 CC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG227257 representing NM_175423
 Red=Cloning site Green=Tags(s)

MHPEPAPPPSHSNPELPVSGGSSTSGSRRSRRRSGDGEPSGAPLPPPPPAVSYPDWIGQSYSEVMSLNE
 HSMQALSWRKL YLSRAKLKASSRTSALLSGFAMVAMVEVQLDTHDYPGLLIVFSACTTVLVAVHLFAL
 MISTCILPNIEAVSNVHNLNSVKESPHERMHRHIELAWAFSTVIGTLLFLAEVLLCWVKFLPLKRQAGQ
 PSPTKPPAESVIVANHSDSSGITPGEAAAIASTAIMVPCGLVFI VFAVHFYRSLVSHKTRDQFQELNELA
 EFARLQDQLDHRGDHSLTPGTHYA

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1207_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_175423

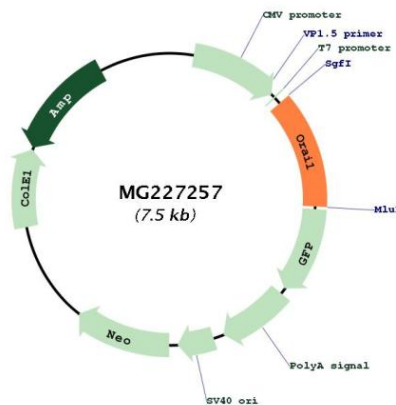
ORF Size: 912 bp

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](#)

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:	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]

Product images:



Circular map for MG227257