

Product datasheet for **RG204448**

ICT1 (MRPL58) (NM_001545) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ICT1 (MRPL58) (NM_001545) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ICT1
Synonyms: DS-1; DS1; ICT1; MRP-L58
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG204448 representing NM_001545
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGCCACCAGGTGCCTGCGCTGGGGCCTGAGCCGAGCCGGAGTCTGGCTGCTCCACCGCCCGCAC
 GGTGCCACGCGGGCGCTGCACAAGCAGAAAGACGGCACTGAGTTCAAGAGCATCTACAGCCTGGACAA
 GCTCTACCCCGAATCTCAGGGCTCGGACACCGCCTGGAGGGTCCCGAATGGTGCAAAGCAAGCCGACAGT
 GACATCCCTCTAGATCGCTTGACAATATCTTATTGTCGGAGTAGTGGTCTGGGGGCAGAATGTGAACA
 AAGTGAATTCCAAGGCAGAAGTCAGGTTCCATTTGGCAACTGCCGAGTGGATCGCGGAGCCCGTGCAGCA
 GAAGATAGCCATCACGCATAAAACAAGATCAACAGGTTAGGAGAGTTGATCCTCACCTCTGAGAGCAGC
 CGCTATCAGTTCCGGAATCTGGCAGATTGCCTGCAGAAAATTCGAGACATGATCACTGAGGCCAGCCAGA
 CACCGAAGGAGCCAACAAAAGAAGATGTTAACTTCATAGAATCAGGATAGAAAACATGAATCGGGAAAG
 GCTGAGACAAAAGAGAATTCATTCTGCTGTAAAGACAAGCAGGAGGGTCGACATGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204448 representing NM_001545
 Red=Cloning site Green=Tags(s)

MAATRLRWGLSRAGVWLLPPPARCPRRALHKQKDGTEFKSIYSLDKLYPESQGSdTAWRPNGAKQADS
 DIPLDRLTISYCRSSGPGQNVNKNVNSKAEVRFHLATAEWIAEPVRQKIAITHKNKINRLGELILTSESS
 RYQFRNLADCLQKIRDMITEASQTPKEPTKEDVKLHRIRIENMNRERLRQKRIHSAVKTSRRVDM

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_001545

ORF Size: 618 bp

OTI Disclaimer: 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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001545.3](#)

RefSeq Size: 888 bp

RefSeq ORF: 621 bp

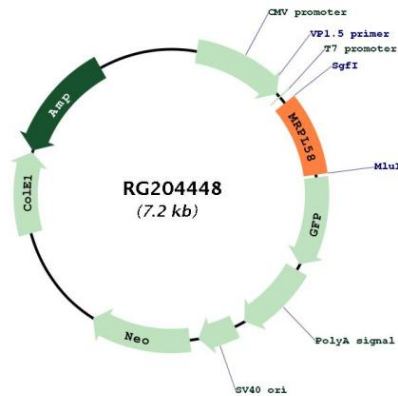
Locus ID: 3396

UniProt ID: [Q14197](#)

Cytogenetics: 17q25.1

Gene Summary: The protein encoded by this gene is a peptidyl-tRNA hydrolase and a vital component of the large mitochondrial ribosome. The encoded protein serves as a ribosome release factor for this ribosome, which translates mitochondrial genes. This protein may be responsible for degrading prematurely-terminated polypeptides and for reusing stalled ribosomes. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RG204448