

Product datasheet for RC229812

Mitochondrial Translational Initiation Factor 3 (MTIF3) (NM_001166261) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mitochondrial Translational Initiation Factor 3 (MTIF3) (NM_001166261) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mitochondrial Translational Initiation Factor 3
Synonyms:	IF3mt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229812 representing NM_001166261 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCTCTTTTTCTAAAGAGGTTAACTACAACTGTAAAGTCTGAAAATAGTTGCATTAGATGTT
TTGGTAAACACATCCTGCAAAAGACAGCACCAGCACAGTTGTCCCTATTGCTTCTGCCCAAGACTCTC
CTTCCTAATTCATGCAAAAGCCTTTAGTACCGCTGAAGACACCCAGAATGAAGGAAAAAGACAAAAAG
AATAAAACAGCTTTTAGTAACGTTGGAAGAAAAATTAGTCAGCGAGTTATCACTTATTTGATGAGAAGG
GCAATGATTTGGAAACATGCACCGAGCAAATGTGATTAGACTTATGGATGAGCGAGACCTGCGACTGGT
TCAAAGGAACACCCAGCACAGAACCTGCAGAGTATCAGCTCATGACAGGATTGCAGATCCTCCAGGAGCGG
CAGAGGCTGAGGGAGATGGAGAAGGCGAACCCCAAACTGGACCAACCCTGAGAAAGGAAGTATTTTGT
CTTCAAATATTGGACAACATGATTTGGACACAAAGACTAAACAGATTGAGCAGTGGATTAAGAAAAACA
CCTAGTCCAGATTACCATAAAGAAAGGAAAAATGTAGACGTGTGAGAAAATGAAATGGAGGAGATTTT
CATCAAATACTCCAGACTATGCCTGGAATAGCTACATTCTCATCTAGGCCACAAGCTGTTCAAGGAGGAA
AAGCTTTAATGTGTGTTCTTCGTGCTTTCAGCAAAAATGAGGAGAAGGCATATAAAGAACTCAAGAGAC
CCAGGAAAGAGACTTTGAACAAAGACCATGAAATGATAAGGAATCAAATGTTCTGCATCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC229812 representing NM_001166261
 Red=Cloning site Green=Tags(s)

MAALFLKRLTLQTVKSENSCIRCFGKHILQKTAPAQLSPIASAPRLSFLIHAKAFSTAEDTQNEGKTKK
 NKTAFSNVGRKISQRVIHLEFDEKGNLGNMHRANVIRLMDERDLRLVQRNTSTEPAEYQLMTGLQILQER
 QRLREMEKANPKTGPTLRKELILSSNIGQHDLDTKTKQIQQWIKKKHLVQITIKKGNVDYSENEMEEIF
 HQILQTMPIATFSSRPQAVQGGKALMCVLRASFKNEEKAYKETQETQERDTLNKDHGNDKESNVLHQ

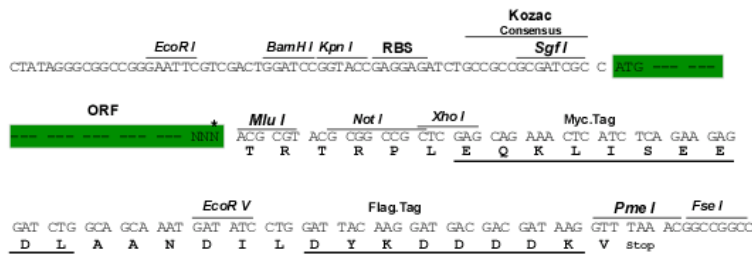
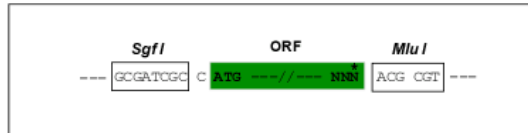
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8048_h05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001166261

ORF Size: 834 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.

RefSeq: [NM_001166261.1](#), [NP_001159733.1](#)

RefSeq ORF: 837 bp

Locus ID: 219402

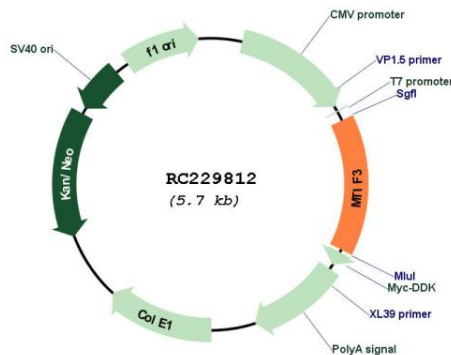
UniProt ID: [Q9H2K0](#)

Cytogenetics: 13q12.2

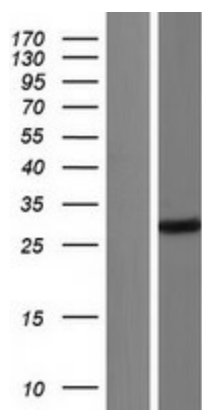
MW: 32.2 kDa

Gene Summary: This gene encodes a translation initiation factor that is involved in mitochondrial protein synthesis. Polymorphism in this gene is associated with the onset of Parkinson's disease. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 5. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RC229812



Western blot validation of overexpression lysate (Cat# [LY432812]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229812 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).