

Product datasheet for **RC203043**

TRNT1 (NM_016000) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRNT1 (NM_016000) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRNT1
Synonyms:	CCA1; CCA1, MtCCA, CGI-47; CGI-47; mitochondrial CCA-adding tRNA-nucleotidyltransferase; MtCCA; tRNA nucleotidyl transferase, CCA-adding, 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC203043 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAAGTTGCAGTCTCCGAATTCAGTCACTTTTCACAGAAGGACTGAAGAGTCTGACAGAATTATTTG
 TCAAAGAGAATCACGAATTAAGAATAGCAGGAGGAGCAGTGAGGGATTTATTAATGGAGTAAAGCCTCA
 GGATATAGATTTTGCACCACTGCTACCCCTACTCAAATGAAGGAGATGTTTCAGTCGGCTGGGATTCGG
 ATGATAAACACAGAGGAGAAAAGCACGGAACAATTACTGCCAGGCTTCATGAAGAAAATTTGAGATTA
 CTACACTACGGATTGATGTCACTGATGGAAGACATGCTGAGGTAGAATTTCAAAGTACTGACGAGAA
 AGATGCGGAACGCAGAGATCTCACTATAAATTCTATGTTTTAGGTTTTGATGGCACTTTATTTGACTAC
 TTTAATGGTTATGAAGATTTAAAAATAAGAAAGTTAGATTTGTTGGACATGCTAAACAGAGAATAACAAG
 AGGATTATCTTAGAATTTAAGATACTCAGGTTTTATGGGAGAATTGTAGACAAACCTGGTGACCATGA
 TCCTGAGACTTTGGAAGCAATTGCAGAAAATGCAAAAGGCTTGGCTGGAATATCAGGAGAAAGGATTTGG
 GTGGAACGAAAAAATCTTGTGGTAACCATGTAAATCATTTGATTACCTTATCTATGATCTTGATG
 TGGCTCCTTATATAGTTTACCTGCTAATGCAAGTTTAGAAGAATTTGACAAAGTCAGTAAAAATGTTGA
 TGGTTTTTACCAGCCAGTCACTTTTTGGCCTCATTATCAAGTACAAGATGATGTACAAAAATTG
 GATTTGAGTTGAAGATCGCGAAAGAGGAGAAAAACCTTGGCTTATTTATAGTTAAAAATAGGAAAGATT
 TAATTAAGCAACAGATAGTTTCAAGCCATTGAAACCCTATCAAGACTTCATTATAGATTCTAGGGAACC
 TGATGCAACTACTCGTGTATGTGAAGTACTGAAGTACCAAGGAGAGCACTGTCTCCTAAAGGAAATGCAG
 CAGTGGTCCATTCCTCCATTTCTGTAAAGTGGCCATGACATCAGAAAAGTGGGCATTTCTCAGGAAAAG
 AAATTTGGGGCTCTATTACAACAGTTGCGAGAACAGTGGAAAAAAGTGGTTACCAATGGAAAAAGATGA
 ACTTCTGAGTTACATAAAGAAGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203043 protein sequence
 Red=Cloning site Green=Tags(s)

MKLQSPFQSLFTEGLKSLTELVKFNHELRIAGGAVRDLLNGVKPQDIDFATTATPTQMKEMFQSAGIR
 MINNRGEKHGTITARLHEENFEITTLRIDVTTDGRHAEVEFTTDWQKDAERRDLTINSMFLGFDGTLFDY
 FNGYEDLKNKKVRFVGHAKQRIQEDYLRLRYFRFYGRIVDKPGDHPETLEAIAENAKGLAGISGERIW
 VELKKILVGNHVNHLIHLIYDLVAPYIIGLPANASLEEFDKVSKNVDGFSPPKPVTLASLKFVQDDVTKL
 DLRLKIAKEEKNLGLFIVKNRDLIKATDSSDPLKPYQDFIIDSREPDATTRVCELLKYQGEHCLKEMQ
 QWSIPFPVSGHDIRKVGISSGKEIGALLQQLREQWKKSGYQMEKDELLSYIKKT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6569_a11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_016000

ORF Size: 1215 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_016000.3](#)

RefSeq Size: 1864 bp

RefSeq ORF: 1217 bp

Locus ID: 51095

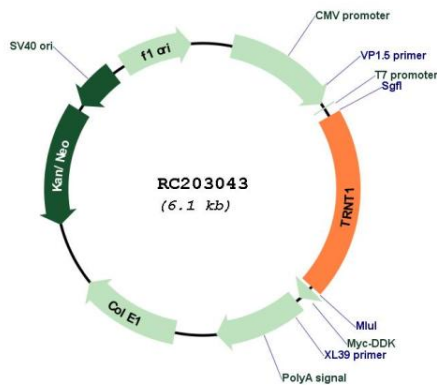
Cytogenetics: 3p26.2

Domains: PolyA_pol

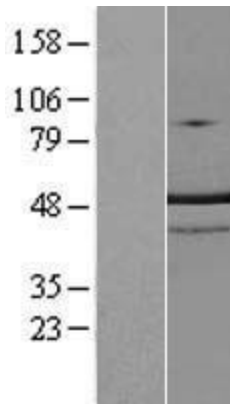
MW: 46.4 kDa

Gene Summary: The protein encoded by this gene is a CCA-adding enzyme which belongs to the tRNA nucleotidyltransferase/poly(A) polymerase family. This essential enzyme functions by catalyzing the addition of the conserved nucleotide triplet CCA to the 3' terminus of tRNA molecules. Mutations in this gene result in sideroblastic anemia with B-cell immunodeficiency, periodic fevers, and developmental delay. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

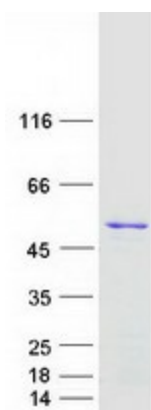
Product images:



Circular map for RC203043



Western blot validation of overexpression lysate (Cat# [LY414245]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203043 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TRNT1 protein (Cat# [TP303043]). The protein was produced from HEK293T cells transfected with TRNT1 cDNA clone (Cat# RC203043) using MegaTran 2.0 (Cat# [TT210002]).