

Product datasheet for **RC210476**

TRIT1 (NM_017646) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRIT1 (NM_017646) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRIT1
Synonyms:	COXPD35; GRO1; hGRO1; IPPT; IPT; IPTase; MOD5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210476 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGTCCGTGGCGGCTGCACGAGCAGTTCCTGGGCGAGTGGGCTCAGGGCCTGCAACGGACCCTAC
 CTCTTGTAGTGATTCTCGGGGCCACGGGACCCGCAAATCCACGCTGGCGTTGCAGCTAGGCCAGCGGCT
 CGGCGGTGAGATCGTCAGCGCTGACTCCATGCAGGTCTATGAAGCCCTAGACATCATACCAACAAGGTT
 TCTGCCCAAGAGCAGAGAATCTGCCGGCACCACATGATCAGCTTTGTGGATCCTCTTGTGACCAATTACA
 CAGTGGTGGACTTCAGAAATAGAGCAACTGCTCTGATTGAAGATATATTTGCCGAGACAAAATCTCTAT
 TGTTGTGGGAGGAACCAATTATTACATTGAATCTCTGCTCTGGAAAGTCTTGTCAATACCAAGCCCCAG
 GAGATGGGCACTGAGAAAGTGATTGACCGAAAAGTGGAGCTTGAAAAGGAGGATGGTCTTGTACTTCACA
 AACGCCTAAGCCAGGTGGACCCAGAAATGGCTGCCAAGCTGCATCCACATGACAAACGCAAAGTGGCCAG
 GAGCTTGAAGTTTTTGAAGAAACAGGAATCTCTCATAGTGAATTTCTCCATCGTCAACATACGGAAGAA
 GGTGGTGGTCCCCTTGGAGGTCCTCTGAAGTCTCTAACCCCTGCATCCTTTGGCTTCATGCTGACCAGG
 CAGTTCAGATGAGCGCTTGGATAAGAGGGTGGATGACATGCTTGTCTGCTGGGCTCTTGGAGGAATAAG
 AGATTTTCACAGACGCTATAATCAGAAGAATGTTTCGAAAAATAGCCAGGACTATCAACATGGTATCTTC
 CAATCAATTGGCTTCAAGGAATTCACGAGTACCTGATCACTGAGGGAAAATGCACACTGGAGACTAGTA
 ACCAGCTTCTAAAGAAAGGATTGAGGCTCTGAAACAAGTAACTAAGAGATATGCCCGGAAAAACAAACCG
 ATGGGTAAAAACCGTTTTTGGAGCAGACTGGTCCCATTGTCCCCCTGTCTATGGCTTAGAAGTATCT
 GATGTCTCGAAGTGGGAAGAGTCTGTTCTTGAACCTGCTCTTGAATCGTGCAAAGTTTCATCCAGGGCC
 ACAAGCTACAGCCACTCAATAAAGATGCCATACAATGAAGCTGAGAACAAGAGAAGTTATCACCTGTG
 TGACCTCTGTGATCGAATCATCATTGGGGATCGCGAATGGGCAGCGCACATAAAAATCCAAATCCCCTTG
 AACCAACTGAAGAAAAGAAGATTGGACTCAGATGCTGTCAACACCATAGAAAAGTCAAGAGTGTTCCTCC
 CAGACCATAACAAAGAACCTAAAGAGAAGGGATCCCCAGGGCAGAATGATCAAGAGCTGAAATGCAGCGT
 T

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210476 protein sequence
 Red=Cloning site Green=Tags(s)

MASVAAARAVPVGSLRGLQRTLPLVVILGATGTGKSTLALQLGQRLGGEIVSADSMQVYEGLDIITNKV
 SAQEQRICRHHMISFVDPLVTNYTVVDFRNATALIEDIFARDKIPIVGGTNYIYESLLWKVLVNTKPQ
 EMGTEKVIDRKVELEKEDGLVLHKRLSQVDPEMAAKLHPHDKRKVARSLQVFEETGISHSEFLHRQHTTE
 GGGPLGGPLKFSNPCILWLHADQAVLDERLDRVDDMLAAGLLEELRDFHRRYNQKNVSENSQDYQHGF
 QSIGFKEFHEYLITEGKCTLETSNQLLKKGIEALKQVTKRYARKQNRWKNRFLSRPGIIVPPVYGLEVS
 DVSKWEESVLEPALEIVQSFIQGHKPTATPIKMPYNEAENKRSYHLCDLDRIIIGDREWAHHKSKSHL
 NQLKKRRRLDSDAVNTIESQSVSPDHNKEPKEKGSFGQNDQELKCSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6071_h01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_017646

ORF Size: 1401 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](#)

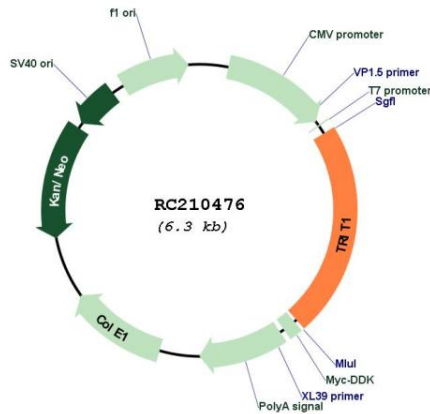
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

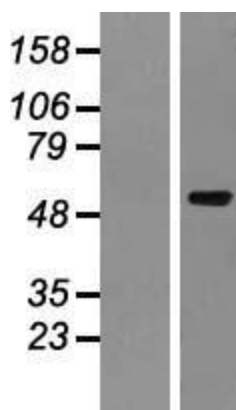
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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:	<u>NM_017646.6</u>
RefSeq Size:	2146 bp
RefSeq ORF:	1404 bp
Locus ID:	54802
UniProt ID:	<u>Q9H3H1</u>
Cytogenetics:	1p34.2
Domains:	IPPT, ZnF_U1
Protein Pathways:	Metabolic pathways
MW:	52.7 kDa
Gene Summary:	This gene encodes a protein that that is targeted to the mitochondrion and modifies transfer RNAs (tRNAs) by adding a dimethylallyl group onto the adenine at position 37. This modification is important for maintaining the correct reading frame during protein translation. This gene is considered a tumor suppressor and its expression can decrease cell growth. Alternative splicing results in multiple transcripts variants, most of which are likely non-functional. [provided by RefSeq, Aug 2015]

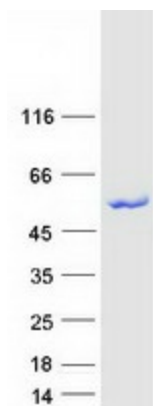
Product images:



Circular map for RC210476



Western blot validation of overexpression lysate (Cat# [LY413645]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210476 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TRIT1 protein (Cat# [TP310476]). The protein was produced from HEK293T cells transfected with TRIT1 cDNA clone (Cat# RC210476) using MegaTran 2.0 (Cat# [TT210002]).