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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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCCGTGGCGGCTGCACGAGCAGTTCCCGTGGGCAGTGGGCTCAGGGGCCTGCAACGGACCCTAC
CTCTTGTAGTGATTCTCGGGGCCACGGGCACCGGCAAATCCACGCTGGCGTTGCAGCTAGGCCAGCGGCT
CGGCGGTGAGATCGTCAGCGCTGACTCCATGCAGGTCTATGAAGGCCTAGACATCATCACCAACAAGGTT
TCTGCCCAAGAGCAGAGAATCTGCCGGCACCACATGATCAGCTTTGTGGATCCTCTTGTGACCAATTACA
CAGTGGTGGACTTCAGAAATAGAGCAACTGCTCTGATTGAAGATATATTTGCCCGAGACAAAATTCCTAT
TGTTGTGGGAGGAACCAATTATTACATTGAATCTCTGCTCTGGAAAGTTCTTGTCAATACCAAGCCCCAG
GAGATGGGCACTGAGAAAGTGATTGACCGAAAAGTGGAGCTTGAAAAGGAGGATGGTCTTGTACTTCACA
AACGCCTAAGCCAGGTGGACCCAGAAATGGCTGCCAAGCTGCATCCACATGACAAACGCAAAGTGGCCAG
GAGCTTGCAAGTTTTTGAAGAAACAGGAATCTCTCATAGTGAATTTCTCCATCGTCAACATACGGAAGAA
GGTGGTGGTCCCCTTGGAGGTCCTCTGAAGTTCTCTAACCCTTGCATCCTTTGGCTTCATGCTGACCAGG
CAGTTCTAGATGAGCGCTTGGATAAGAGGGTGGATGACATGCTTGCTGCTGGGCTCTTGGAGGAACTAAG
AGATTTTCACAGACGCTATAATCAGAAGAATGTTTCGGAAAATAGCCAGGACTATCAACATGGTATCTTC
CAATCAATTGGCTTCAAGGAATTTCACGAGTACCTGATCACTGAGGGAAAATGCACACTGGAGACTAGTA
ACCAGCTTCTAAAGAAAGGTATTGAGGCTCTGAAACAAGTAACTAAGAGATATGCCCGGAAACAAAACCG
ATGGGTTAAAAACCGTTTTTTGAGCAGACCTGGTCCCATTGTCCCCCCTGTCTATGGCTTAGAAGTATCT
GATGTCTCGAAGTGGGAAGAGTCTGTTCTTGAACCTGCTCTTGAAATCGTGCAAAGTTTCATCCAGGGCC
ACAAGCCTACAGCCACTCCAATAAAGATGCCATACAATGAAGCTGAGAACAAGAGAAGTTATCACCTGTG
TGACCTCTGTGATCGAATCATCATTGGGGATCGCGAATGGGCAGCGCACATAAAATCCAAATCCCACTTG
AACCAACTGAAGAAAAGAAGAAGATTGGACTCAGATGCTGTCAACACCATAGAAAGTCAGAGTGTTTCCC
CAGACCATAACAAAGAACCTAAAGAGAAGGGATCCCCAGGGCAGAATGATCAAGAGCTGAAATGCAGCGT
T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

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

MASVAAARAVPVGSGLRGLQRTLPLVVILGATGTGKSTLALQLGQRLGGEIVSADSMQVYEGLDIITNKV
SAQEQRICRHHMISFVDPLVTNYTVVDFRNRATALIEDIFARDKIPIVVGGTNYYIESLLWKVLVNTKPQ
EMGTEKVIDRKVELEKEDGLVLHKRLSQVDPEMAAKLHPHDKRKVARSLQVFEETGISHSEFLHRQHTEE
GGGPLGGPLKFSNPCILWLHADQAVLDERLDKRVDDMLAAGLLEELRDFHRRYNQKNVSENSQDYQHGIF
QSIGFKEFHEYLITEGKCTLETSNQLLKKGIEALKQVTKRYARKQNRWVKNRFLSRPGPIVPPVYGLEVS
DVSKWEESVLEPALEIVQSFIQGHKPTATPIKMPYNEAENKRSYHLCDLCDRIIIGDREWAAHIKSKSHL
NQLKKRRRLDSDAVNTIESQSVSPDHNKEPKEKGSPGQNDQELKCSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

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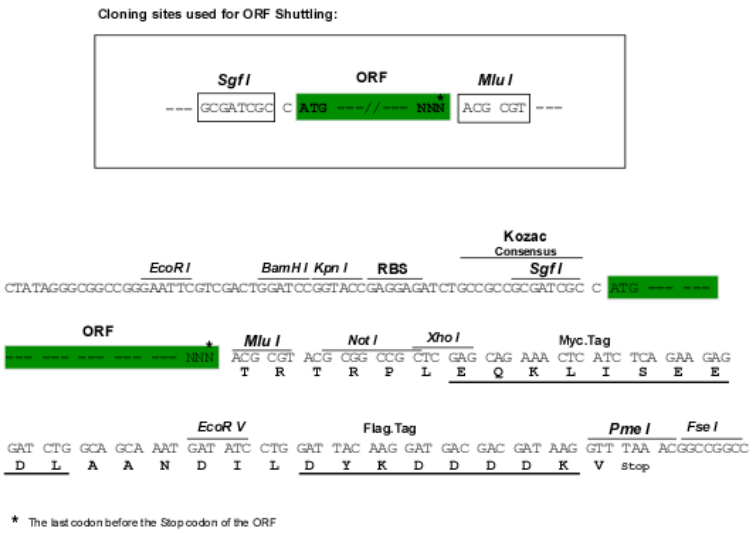
Cloning Scheme:



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.

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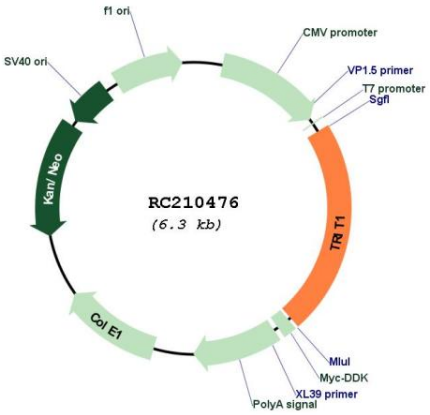
RefSeq:	NM_017646.6
RefSeq Size:	2146 bp
RefSeq ORF:	1404 bp
Locus ID:	54802
UniProt ID:	Q9H3H1
Cytogenetics:	1p34.2
Domains:	IPPT, ZnF_U1
Protein Pathways:	Metabolic pathways
MW:	52.7 kDa
Gene Summary:	This gene encodes a protein that that is targeted to the mitochondrion and modifies transfer RNAs (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

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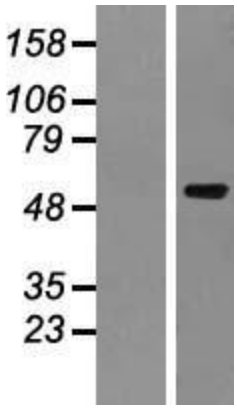
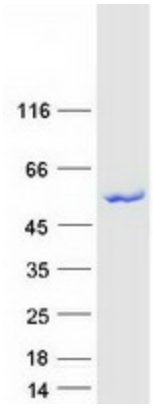


Western blot validation of overexpression lysate (Cat# [LY413645]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210476 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



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]).

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