

## Product datasheet for **SC317768**

### TRIT1 (NM\_017646) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRIT1 (NM_017646) Human Untagged Clone
Tag:	Tag Free
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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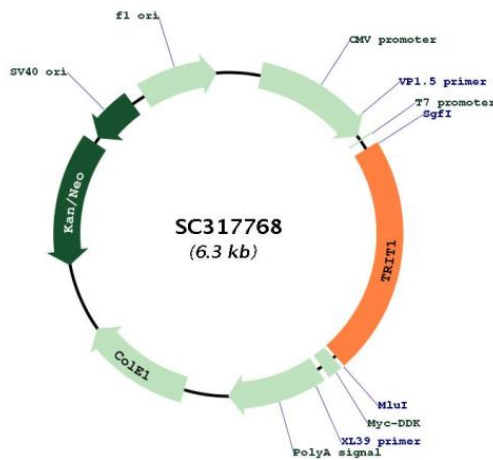
**Fully Sequenced ORF:** >SC317768 representing NM\_017646.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGTCCGTGGCGGCTGCACGAGCAGTTCCTCGTGGCAGTGGGCTCAGGGCCTGCAACGGACCCTA
CCTCTTGTAGTGATTCTCGGGCCACGGCCAGGAAATCCACGCTGGCGTTGCAGCTAGGCCAGCGG
CTCGGCGGTGAGATCGTCAGCGCTGACTCCATGCAGGTCTATGAAGGCCTAGACATCATACCAACAAG
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CCTATTGTTGTGGGAGGAACCAATTATTACATTGAATCTCTGCTCTGAAAAGTTCTTGTCAATACCAAG
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GCTGACCAGGCAGTTCTAGATGAGCGCTTGGATAAGAGGGTGGATGACATGCTTGTCTGGGCTCTTG
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CATGGTATCTTCCAATCAATTGGCTTCAAGGAATTTACGAGTACCTGATCACTAGGGAAAAATGCACA
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CGGAAACAAAACCGATGGGTTAAAACCGTTTTTGGAGCAGACCTGGTCCCATTGCCCCCTGTCTAT
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GAAAGTCAGAGTGTTCAGACCATAACAAAGAACCTAAAGAGAAGGGATCCCAGGGCAGAATGAT
CAAGAGCTGAAATGCAGCGTTTAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** Sgfl-MluI

**Plasmid Map:**



**ACCN:** NM\_017646

**Insert Size:** 1404 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](mailto: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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_017646.5](#)

**RefSeq Size:** 2159 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 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]

Transcript Variant: This variant (1) encodes the longest functional protein (isoform 1).