

## Product datasheet for **RC234503**

### **TARS2 (NM\_001271896) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TARS2 (NM_001271896) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TARS2
Synonyms:	COXPD21; TARSL1; thrRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234503 representing NM\_001271896  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCCTGTATCAGAGGTGGCGGTGTCTCCGGCTCCAAGGTTTACAGGCTTGCAGGCTACACACGGCAG  
 TTGTGTCGACCCCTCCACGCTGGTTGGCAGAGCGGCTTGGCCTTTTTGAGGAGCTGTGGCTGCTCAGGT  
 AAAGAGATTAGCAAGCATGGCACAGAAGGAACCCCGACTATTAAGATATCACTTCTGGAGGCCAGAAA  
 ATTGATGCTGTGGCATGGAACACAACCCCTACCAACTAGCCCGCAGATCAGTTCAACTGTCAGATA  
 CTGCAGTGGCTGCTCAAGTGAATGGAGAACCTTATGATCTGGAGCGGCCCTTGGAGACAGATTCTGACCT  
 CAGATTTCTGACATTCGATTCGCCAGAGGGAAAGCAGTGTCTGGCACTCCAGCACCCATGTCTGGGG  
 GCAGCAGCTGAACAATTCCTAGGTGCTTCTCTGCAGAGGTCCAAGTACAGAATATGGCTTTTACCATG  
 ATTTCTTCTGGAAAGGAGAGGACAATCCGGGGCTCAGAGCTGCCTGTTTTGGAGCGGATTTGCCAGGA  
 ACTTACAGCTGCTGCTCGACCCCTCCGGAGGCTAGAGGCTTACGGGATCAGCTTCGCCAGTTGTTCAAG  
 GCTGAGTATGCCCATCGTGGTTTTCTCCGAGGTGAAAACCTCCACACTGTTTTCTACGAAGCTCTGGGAAC  
 AGTCAGGGCACTGGGAGCATTATCAGGAAGACATGTTTGGCGTGCAGCCCCAGGCTCTGACAGGCTCC  
 CAGCTCCCAGAGTGACGATTCTACCAGGCATATCACAGATACACTCGCCCTCAAGCCTATGAACTGCCCT  
 GCACACTGCCTGATGTTCCGCCACCGGCCAGATCCTGGCGGAACTGCCCTGCGACTAGCTGACTTTG  
 GGGCTCTACACCGGGCCGAAGCCTCTGGTGGTCTGGGGGACTGACCCGACTGCGGTGCTTCCAGCAGGA  
 TGACGCTCACATCTTCTGTACAACAGATCAGCTGGAAGCAGAGATCCAAAGCTGTCTTGAATTCCTCCGT  
 TCCGTCTATGCCGTTCTTGGCTTCTCTTCCGCTGGCACTGTCCACCCGGCCATCTGGCTTCTTGGGG  
 ACCCTTGCCCTTTGGGACCAGGCCAACAGTCTTAAACAGGCCCTGAAGGAATTTGGAGAACCCTGGGA  
 CCTCAACTCTGGAGATGGTGCCTTCTATGGACCTAAGATTGACGTGCACCTCCACGATGCCCTGGGCCGG  
 CCACATCAGTGTGGGACAATTCAGCTTGACTTCCAACCTGCCCTGAGATTTGACCTCCAGTATAAGGGC  
 AGGCGGGTGCCTGGAGCGTCCAGTCTCATTACCGAGCAGTGTCTGGTTCTGTGGAAAGACTGTTGGG  
 AGTGTGGCAGAAAGCTGCGGGGGGAAATGGCCACTGTGGCTGTCCCGTTCAGGTGGTGGTATCCCT  
 GTGGGGAGTGAGCAAGAGGAATACGCCAAAGAGGCACAGCAGAGCCTGCGGGCTGCAGGACTGGTCACTG  
 ACCTGGATGCAGACTCTGGACTGACCCCTCAGCCGGAGAATCCGCCGGGCCAGCTTGCCACTACAATTT  
 TCAGTTTGTGGTTGGCCAGAAAGAGCAAAGTAAGAGAACAGTGAACATTCGGACTCGAGATAATCGTCGC  
 CTTGGGGAGTGGGACTTGCTGAGGCTGTGCAGCGACTGGTGGAGCTACAGAACACGAGGTTCCAAATG  
 CCGAAGAAATTTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234503 representing NM\_001271896  
 Red=Cloning site Green=Tags(s)

MALYQRWRCLRLQGLQACRLHTAVVSTPPRWLAERLGLFEELWAAQVKRLASMAQKEPRTIKISLPGGQK  
 IDAVAWNTTPYQLARQISSTLADTAVAAQVNGEPYDLERPLETDSDLRFLTFDSPEGKAVFWSSTHVLG  
 AAAEQFLGAVLCRGPSTEYGFYHDFLKGKERTIRGSELPVLERICQELTAAARPFRRLEASRDQLRQLFK  
 AEYAHRGFSEVKPTLFLSTKLWEQSGHWEHYQEDMFAVQPPGSDRPPSSQSDSTRHITDLALKPMNCP  
 AHCLMFHRPRSWRELPLRLADFGALHRAEASGGLGGLTRLRCFQQDDAHIFCTTDQLEAEIQSCLDFLR  
 SVYAVLGF SFRALALSTRPSGFLGDPCLWDQAEQVLKQALKEFGEPWDLNSGDGAFYGPKIDVHLHDALGR  
 PHQCGTIQLDFQLPLRFDLQYKQAGALERPVL IHRVAVLGSVERLLGVLAESCGGWPLWLSPFQVVVIP  
 VGSEQEEYAKEAQQSLRAAGLVSDLDADSGLTL SRRIRRAQLAHYNFQFVVGQKEQSKRTVNIIRTRDNRR  
 LGEWDLPEAVQRLVELQNTTRVPAEEIF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001271896

**ORF Size:** 1764 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\\_001271896.2](#)

**RefSeq Size:** 2417 bp

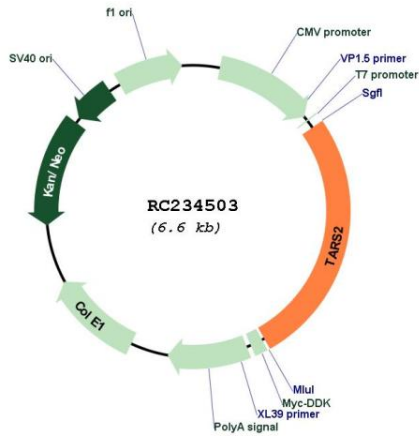
**RefSeq ORF:** 1767 bp

**Locus ID:** 80222

**UniProt ID:** [Q9BW92](#)

**Cytogenetics:** 1q21.2  
**Protein Pathways:** Aminoacyl-tRNA biosynthesis  
**MW:** 66.8 kDa  
**Gene Summary:** This gene encodes a member of the class-II aminoacyl-tRNA synthetase family. The encoded protein is a mitochondrial aminoacyl-tRNA synthetase. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 4. [provided by RefSeq, Dec 2012]

**Product images:**



Circular map for RC234503