

## Product datasheet for **RC234841**

### **TARS1 (NM\_001258438) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TARS1 (NM_001258438) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TARS1
Synonyms:	TARS; ThrRS; TTD7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC234841 representing NM\_001258438  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTTGAGGAGAAGGCCAGCAGTCCTTCAGGGAAGATGGGAGGCGAGGAGAAGCCGATTGGTGCTGGTGAAGAGAAGCAAAAAGGAAGGAGGCCAAAAAGAAGCAAAAGGATCTGGAGATGGAGGTCGAGCTGAGTTGAATCCTTGGCCTGAATATATTTACACACGTCCTTGAGATGTATAATACTAAAAGCAGAACATGATTCCATTCTGGCAGAAAAGGCAGAAAAAGATAGCAAGCCAATTAAGTCACTTTGCCTGATGGTAAACAGGTTGATGCGGAATCTTGGAAAACACACCATACAAATTGCCTGTGGAATTAGTCACACAGCTTCTGCAAAAACTCTCTTCACTTGCATCTCTGCTTGCATCTGTGGCCATTCCTCATCTGGAATGCCATGGCCTCTCTTTCTTCTTCAAGGCCTGGCCGACAACACCGTTATTGCTAAAGTAAATAATGTTGTGTGGGACCTGGACCGCCTCTGGAAGAAGATTGTACCTTGGAGCTTCTCAAGTTTGGAGATGAGGAAGCTCAGGCAGTGTATTGGACTCTAGTGCTCACATAATGGGTGAAGCCATGGAAAGAGTCTATGGTGGATGTTTATGCTACGGTCCGCCAATAGAAAATGGATTCTATTATGACATGTACCTCGAAGAAGGGGTGTGTCTAGCAATGATTTCTCTCTCTGGAGGCTTTGTGTAAAGAAAATCATTAAAGAAAAACAAGCTTTTGAAGACTGGAAGTTAAGAAAGAACTTTACTGGCAATGTTAAGTACAACAAGTTCAAATGCCGGATATTGAATGAAAAGGTGAATACTCCAACACAGTCTATAGATGTGGCCCTTGTATAGATCTCTGCCGGGTCCTCATGTTAGACACACGGGCAAAATTAAGGCTTTAAAAATACACAAAAATTCCTCCACGTACTGGGAAGGCAAGCAGATAGGAGACTCTCCAGAGAAATTTATGGCATTTCATTTCCAGATCCTAAAAATGTTGAAAGAGTGGGAGAAGTTCCAAGAGGAAAGTAAAGCTTTTCTGCCAAAAGGAGCCTACATTTATAATGCACTTATTGAATTCATTAGGAGCGAATATAGGAAAAGAGGATTCCAGGAGGTAGTACCCCAACATCTTCAACAGCGACTCTGGATGACCTCGGGCCACTGGCAGCACTACAGCGAGAACATGTTCTCTTTGAGGTGGAGAAGGAGCTGTTTGCCTGAAAACCAAGAAGTGGCCAGGACACTGCCTTATGTTTATCATCGGCCAAGTCTGGCGAGAAGTGCCTCTGCGGCTAGCTGATTTTGGGTAAGTTCATAGGAACGAGCTGTCTGGAGCACTCACAGGACTCACCCGGTACGAAGATTCCAACAGGATGATGCTCACATATTCTGTGCCATGGAGCAGATTGAAGATGAAATAAAAGGTTGTTTGGATTTTCTACGTACGATATAGCGTATTTGGATTTTCTTTAACTAAACCTTTCTACTCGCCCGAAAAATTCCTTGGAGATATCGAAGTATGGGATCAAGCTGAGAAACAAGTGAAGACAGTCTGAATGAATTTGGTGAAGAGTGGGAGTTAACTCTGGAGATGGAGCTTCTATGGCCAAAGATTGACATACAGATTAAGATGCGATTGGGCGGTACCACAGTGTGCAACCATCCAGCTGGATTTCCAGTTGCCATCAGATTAATCTTACTTATGTAAGCCATGATGGTATGATAAGAAAAGGCCAGTATTGTTTATCGAGCCATCTTGGGATCAGTGAAGAATGATTGCTATCCTCACAGAAAATATGGGGGCAAAATGGCCCTTTTGGCTGTCCCTCGCCAGGTAATGGTATGTCAGTGGGACCAACCTGTGATGAATATGCCAAAAGGTACGACAACAATTCACAGTGCACAAATTCATGGCAGACATTGATCTGGATCCAGGCTGTACATTGAATAAAAAGATTGAAATGCACAGTTAGCACAGTATAACTTCATTTTAGTTGTTGGTAAAAAGAGAAAAATCAGTGGCACTGTTAATATCCGCACAAAGAGACAATAAGGTCCACGGGAACGCACCATTTCTGAAACTATCGAGCGGCTACAGCAGCTCAAAGATTCGCAGCAAACAGGCAGAAAGAAGTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC234841 representing NM\_001258438  
 Red=Cloning site Green=Tags(s)

MFE EKASSPSGKMGEEKPIGAGEEKQKEGGKKKNKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDS  
 ILAEKAEKDSKPIKVTLDPGKQVDAESWKTTPYQIACGISHTASCKNLSSLASLLASVAIPSSGMPWPPL  
 FFLOQLADNTVIAKVNNVVWDLDRPLEEDCTLELLKFEEEAQAVYWHSSAHIMGEAMERYVGGCLCYGP  
 PIENGFYYDMYLEEGVSSNDFSSLEALCKKIIEKQAFERLEVKKETLLAMFKYKFKCRILNEKVNT  
 TTTVYRCGPLIDLRCRPHVRHTGKIKALKIHKNSSTYWEKGADMETLQRIYGISFPDPKMLKEWEKFQEE  
 AKNRDHRKIGRDQELYFFHELSPGSCFFLPKGAYIYNALIEFIRSEYRKRGFQEVVTPNIFNSRLWMTSG  
 HWQHYSENMFSFEVEKELFALKPMNCPGHCLMFDHRPRSWRELPLRLADFGVLHRNELSGALTGLTRVRR  
 FQDDAHIFCAMEQIEDEIKGCLDFLRTVYSVGFSGFLNLSTRPEKFLGDI EVDQAEKQLENSLNEFG  
 EKWELNSGDGAFYGPKIDIQIKDAIGRYHCATIQLDLQPIRFNLTYVSHDGDKKRPVIVHRAILGSV  
 ERMIAILTENYGGKWPFWLSPRQVMVVPVGPCTCEYAQKVRQQFHDAKFMADIDLDPGCTLNKKIRNAQL  
 AQYNFILVVGEEKISGTVNIRTRDNKVHGERTISETIERLQQLKEFRSKQAEFEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001258438

**ORF Size:** 2268 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\\_001258438.1](#), [NP\\_001245367.1](#)

**RefSeq Size:** 2974 bp

**RefSeq ORF:** 2271 bp

**Locus ID:** 6897

**UniProt ID:** [P26639](#)

**Cytogenetics:** 5p13.3

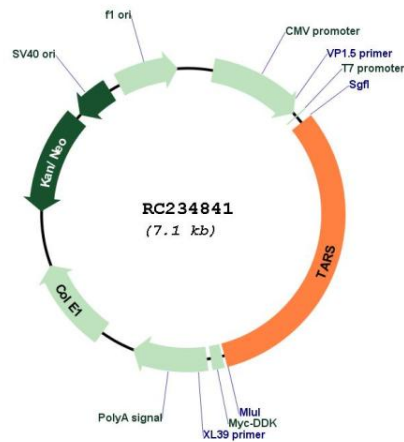
**Protein Families:** Druggable Genome

**Protein Pathways:** Aminoacyl-tRNA biosynthesis

**MW:** 87.3 kDa

**Gene Summary:** Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Threonyl-tRNA synthetase belongs to the class-II aminoacyl-tRNA synthetase family [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RC234841