

Product datasheet for **RG234776**

TARS1 (NM_001258437) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TARS1 (NM_001258437) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TARS1
Synonyms:	TARS; ThrRS; TTD7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG234776 representing NM_001258437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTGAGGAGAAGGCCAGCAGTCCTTCAGGGAAGATGGGAGGCGAGGAGAAGCCGATTGGTGCTGGT
 AAGAGAAGCAAAAGGAAGGAGGCCAAAAGAAGAACAAGGATCTGGAGATGGAGGTCGAGCTGAGTT
 GAATCCTTGCCCTGAATATATTTACACACGCTCTTGAGATGTATAATACTAAAAGCAGAACATGATTCC
 ATTCTGGCAGAAAAGGCAGAAAAAGATAGCAAGCCAATTAAGTCACTTTGCCTGATGGTAAACAGGTTG
 ATGCGGAATCTTGAAAACACTACCCATATCAAATGCCTGTGGAATTAGTCAAGGCTGGCCGACAACAC
 CGTTATTGCTAAAGTAAATAATGTTGTGTGGGACCTGGACCGCCCTCGGAAGAAGATTGTACCTGGAG
 CTTCTCAAGTTTGGAGTGAAGGCTCAGGCAGTGTATTGGCACTCTAGTGTACATAATGGGTGAAG
 CCATGGAAGAGTCTATGGTGGATGTTTATGCTACGGTCCGCAATAGAAAATGGATTCTATTATGACAT
 GTACCTCGAAGAAGGGGTGTGTCTAGCAATGATTTCTCTCTCTGGAGGCTTTGTGAAGAAAATCATT
 AAAGAAAAACAAGCTTTTGAAAGACTGGAAGTTAAGAAAAGAACTTTACTGGCAATGTTTAAAGTACAACA
 AGTTCAAATGCCGGATATTGAATGAAAAGGTGAATACTCCAACACTACCACAGTCTATAGATGTGGCCCTT
 GATAGATCTCTGCCGGGTCTCATGTTAGACACACGGGCAAAATTAAGGCTTTAAAAATACACAAAAAT
 TCCTCCACGACTGGGAAGGCAAGCAGATATGGAGACTCTCCAGAGAATTTATGGCATTTCATCCCAG
 ATCCTAAAATGTTGAAAGAGTGGGAGAAGTCCAAAGAGGAAGCTAAAACCGAGATCATAGGAAAATTGG
 CAGGGACCAAGAACTATATTTCTTTCATGAACCTCAGCCCTGGAAGTTGCTTTTTCTGCCAAAAGGAGCC
 TACATTTATAATGCACCTATTGAATTCATTAGGAGCGAATATAGGAAAAGAGGATTCCAGGAGGTAGTCA
 CCCCAAACATCTTCAACAGCCGACTCTGGATGACCTCGGGCCACTGGCAGCACTACAGCAGAACATGTT
 CTCCTTTGAGGTGGAGAAGGAGCTGTTTGCCTGAAACCCATGAACTGCCAGGACACTGCCTTATGTTT
 GATCATCGGCCAAGGTCCTGGCGAGAAGTGCCTCTGCGGCTAGCTGATTTTGGGTACTTCATAGGAACG
 AGCTGTCTGGAGCACTCACAGGACTCACCCGGTACGAAGATTCCAACAGGATGATGCTCACATATTCTG
 TGCCATGGAGCAGATTGAAGATGAAATAAAAGGTTGTTTGGATTTTCTACGTACGGTATATAGCGTATTT
 GGATTTTCTTTAACTAAACCTTTCTACTCGCCCGAAAAATTCCTTGGAGATATCGAAGTATGGGATC
 AAGCTGAGAAACAACCTGAAAACAGTCTGAATGAATTTGGTAAAAGTGGGAGTTAACTCTGGAGATGG
 AGCTTTCTATGGCCAAAGATTGACATACAGATTAAGATGCGATTGGGCGTACCACCAGTGTGCAACC
 ATCCAGCTGGATTTCCAGTTGCCATCAGATTTAATCTTACTTATGTAAGCCATGATGGTGTATGATAAGA
 AAAGGCCAGTGATTGTTTCATCGAGCCATCTGGGATCAGTGGAAGAATGATTGCTATCCTCACAGAAAA
 CTATGGGGGCAAAATGGCCCTTTGGCTGTCCCCTCGCCAGGTAATGGTAGTTCCAGTGGGACCAACCTGT
 GATGAATATGCCAAAAGGTACGACAACAATCCACGATGCCAAATTCATGGCAGACATTGATCTGGATC
 CAGGCTGTACATTGAATAAAAAGATTGAAAATGCACAGTTAGCACAGTATAAATTCATTTTAGTTGTTGG
 TGAAAAAGAGAAAATCAGTGGCACTGTTAATATCCGCACAAGAGACAATAAGGTCCACGGGGAACGCACC
 ATTTCTGAAACTATCGAGCGCTACAGCAGCTCAAAGAGTTCCGCAGCAACAGGCAGAAGAAGAATTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234776 representing NM_001258437
 Red=Cloning site Green=Tags(s)

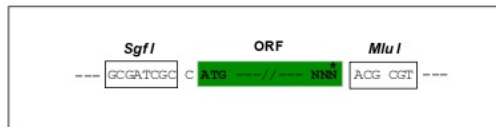
MFE EKASSPSGKMGEEKPIGAGEEKQKEGGKKKNKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDS
 ILAEKAEKDSKPIKVTL PDGKQVDAESWKTPYQIACGISQGLADNTVIKVN NVVWDLDRPLEEDCTLE
 LLKFEEDEEAQAVYWHSSAHIMGEAMERVYGGCLCYGPIIENGFYDMYLEEGVSSNDFSSLEALCKKII
 KEKQAFERLEVKKETLLAMFKYKFKCRILNEKVNTPTTTVYRCGPLIDL CRGPHVRHTGKIKALKIHK
 SSTYWEGKADMETLQRIYGISFPDPKMLKEWEKQEEAKNRDHRKIGRDQELYFFHELSPGSCFFLPKGA
 YIYNALIEFIRSEYRKRGFQEVVTPNIFNSRLWMTSGHWQHYSENMF SFEVEKELFALKPMNCPGCLMF
 DHRPRSWRELPLRLADFGVLHRLNELSGALTGLTRVRRFQQDDAHIFCAMEQIEDEIKGCLDFLRTVYSVF
 GFSFKLNLSTRPEKFLGDI EVWDQAEKQLENSLNEFGEK WELNSGDGAFYGP KIDIQIKDAIGRYHQCAT
 IQLDFQLPIRFNLTYVSHDGD KRPVIVHRAILG SVERMIAILTENYGGKWPFWLSPRQVMVVPVGP TC
 DEYAQKVRQQFHDAKFMADIDLDPGCTLNKKIRNAQLAQYNFILV VGEKEKISGTVNIRTRDNK VHGERT
 ISETIERLQQLKEFRSKQAE EEF

TRTRPLE - GFP Tag - V

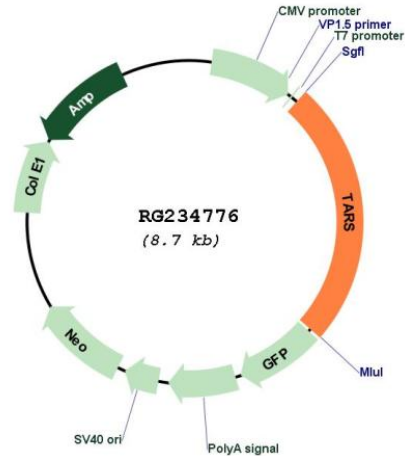
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001258437

ORF Size: 2169 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_001258437.1](#), [NP_001245366.1](#)

RefSeq Size: 2701 bp

RefSeq ORF: 2172 bp

Locus ID:	6897
UniProt ID:	P26639
Cytogenetics:	5p13.3
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis
Gene Summary:	<p>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]</p>