

## Product datasheet for **MR217485**

### Tars2 (NM\_027931) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tars2 (NM_027931) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tars2
Synonyms:	2610024N01Rik; AI429208; Tarsl1; thrRS
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>MR217485 representing NM\_027931  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGGGTCTCTGTCTGAGGTGGCGCCGGCTTGGGTTCCCACTCCCAGAGTTCGCCCGCTGCGAGCTCCACA  
CCGTGCGTGAGGCCTCTGCACCAACTCCTCCACATTGGTTGGCAGAACGATTTGGCCTTTTTGAGGAGCT  
ATGGACCCTCACGTGAAAAAGTTAGCAAGTATGACACAGAAGAAAGCCCGGGCTATTAAGATATCACTT  
CCTGAAGGCCAGAAGGTAGATGCTGTTGCATGGAACACAACCCCTTACCAACTGGCCATCAGATCAGTG  
TAACACTGGCTGATACTGCAGTGGCTGCTGAAGTAAATGGAGAAGTTTACGATCTGGACCGACCTTGG  
GACAGATTGTACCTCAGATTTCTGACATTTGATTCCCCAGAGGGCAAAGCGGTGTTCTGGCACTCTAGT  
GCCCATGTTCTGGGGCTGCGGCTGAGCAACAACCTGGGTGCTGTTCTCTGCCGAGGTCCAAGCACAGAAT  
CGGGCTTTTACCATGACTTCTTCTGGGAAAAGAACGGACAGTCCGCAGCGCAGAGTTGCCATTTTAGA  
GCGGATTTGCCAGGAGCTCATAGCTGCTGCACAGCCTTTCCGGAGGCTGGAGGCTTCACGGGATCAGCTT  
CGCCAGCTCTTCAAGGACAACCACTTTAAGCTTCACTGATCGAGGAGAAAGTGACAGGCCAACCGCAA  
CAGTGTATGGGTGTGGCATGTACGTTGACCTGTGCCGAGGCCCCATCTTCGGCACACTGGACAGATTGG  
AGCACTGAAGCTGCTCACGAACCTCTCAGCCTTGTGGAGGTCCTTGGGAGCACCTGAGACACTGCAGAGG  
GTATCAGGAATTTCTTTCCCAAAGTAGAGTACTGAGGAACTGGGAAGCTCGAAGAGAAGCAGCAGAGT  
TAAGAGACCACAGACGATTGGGAAGGAACAGGAGCTCTTCTTCCATGAACTGAGCCCTGGGAGCTG  
TTTTTCTTGGCCAGGAGCAAGAGTCTATAATGCCCTGGTGGCTTTCATCAGGGCTGAGTATGCCCGC  
CGTGGTTTCTCAGAGGTAAAACCTCCACGCTGTTTTCTACAAAACCTCTGGGAACAGTCAAGGCACTGGG  
AACACTATAGGGCAGACATGTTTTCCCTGAAGCCCTTGGCACTGATGGTGTGACAACCTCCAGAGTGG  
CCATCCTGCCAGGTGTCCCAAAGACACACTTGCTCTAAAGCCCATGAACTGCCCTGCACACTGCCTGATG  
TTTGCCACCAGGCCAGATCCTGGAGGAACTGCCTGTGCGACTGGCTGATTTCCGAGCCCTGCATCGGG  
CTGAGGCCTCTGGCAGTCTGGGAGGATTAACGCGGCTGTGGCGCTTCCAGCAGGATGATGCGCACATCTT  
TTGTGCACCCATCAGCTGGAAGCAGAGATCCAGGGCTGCCTTGATTTTCTCCGGTGTGTTTACTCGGT  
CTTGGTTTTCTTCCACCTGGCTTTATCTACCCGGCCACCTGGTTTTCTAGGGGAGCCTCGCCTATGGG  
ACCAGGCTGAGCAGGTTCTACAGCAAGCCTTGGAGAAGTTTGGAGAACCTTGGGACCTCAACCCTGGAGA  
TGGGGCTTTCTATGGGCCTAAGATTGATGTGCACCTCCACGACGCCCTTGGTCGGCCCATCAGTGTGGA  
ACAATCCAGCTTGACTTCCAGCTGCCACTGAGATTTGACCTACAATAAAGGGGCCGCGCAGTACCCAG  
AGTGTCCAGTCTTATTCATCGAGCAGTCTTGGTTCTGTGGAAGGCTGTTGGGAGTGCTGGCAGAAAG  
CTGTGGGGGAAATGGCCCTGTGGCTGTCCCGCTCCAGGTGGTGGTATCCCTGTGAGGACAGAGCAA  
GAGGAATATGCCAGGCAGGTGCAACAGTGCCTGCAGGCTGCAGGACTTGTGAGTGATCTCGATGCAGACT  
CTGGACTGACCCTCAGCCGGAGAGTCCGCCGGGCCAGCTTGCCCACTACAACCTTTCAGTTTGTGGTTGG  
CCAGAGAGAGCAGAGTCAAAGGACAGTGAACGTACGCACGCGAGATAACCGGCAGCTCGGGGAGCGAGAC  
CTGGCCGAGTCCGTGCAGAGACTGCTGGAGTTACAGAACGCCAGGGTCCCAATGCAGAAGAAGTGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217485 representing NM\_027931  
 Red=Cloning site Green=Tags(s)

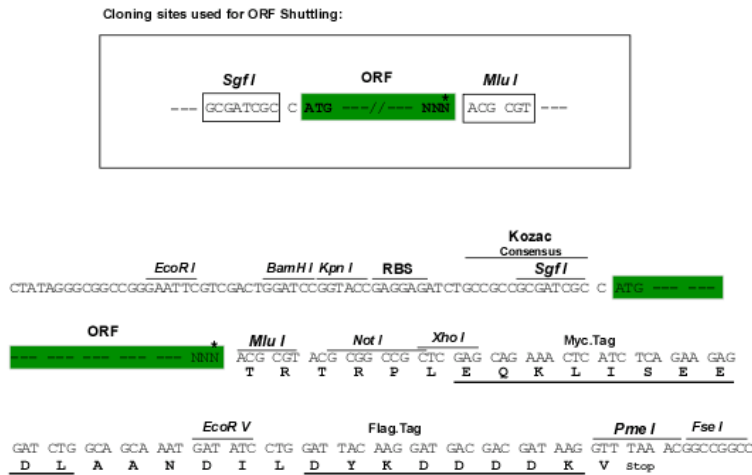
MGLCLRWRRLGFPLPEFRRCELHTVREASAPTPPHWLAERFGLFEELWTAHVKKLASMTQKKARAIKISL  
 PEGQKVDVAWNTTPYQLAHQISVTLADTAVAAEVNGLYDLDRPLETDCHLRFLTFDSPEGKAVFWHSS  
 AHVLGAAAEQQLGAVLCRGPSTESGFYHDFFLGKERTVRSaelPILERICQELIAAAQPFRRLEASRDQL  
 RQLFKDNHFKLHLIEEKVTGPTATVYGGMSVDLCRPHLRHTGQIGALKLLTNSSALWRLGAPETLQR  
 VSGISFPKVELLRNWEARREAELRDHRRIGKEQELFFHELSPGSCFFLPRGTRVYNALVAFIRAEYAR  
 RGFSEVKTPTLFSTKLWEQSGHWEHYRADMFLSKPPGTDGVDNSQSGHPARCPKDTLALKPMNCPAHCLM  
 FAHRPRSWREL PVRLADFGALHRAEASGSLGGLTRLWRFQDDAHIFCAPHQLEAEIQGCLDFLRVYVS  
 LGFSFHLALSTRPPGFLGEPRLWDQAEQVLQQALEKFGEPWDLNPGDGAfyGPKIDVHLHDALGRPHQCG  
 TIQLDFQLPLRFDLQYKGPAGTPECPVL IHRAVLGSVERLLGVLAE SCGGKWPLWLSPLQVVVIVPVRTEQ  
 EEARQVQQCLQAAGLVSDLDADSGTL SRRVRAQLAHYNFQFVVGQREQSQRTVNVRTDRNRQLGERD  
 LAESVQRLLLELQNARVPNAEEVF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

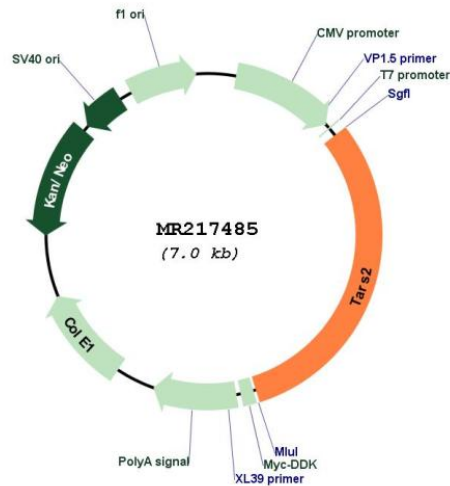
Sgfl-MluI

Cloning Scheme:



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

## Plasmid Map:



ACCN: NM\_027931

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\\_027931.3](#), [NP\\_082207.2](#)

RefSeq Size: 2524 bp

RefSeq ORF: 2172 bp

Locus ID:	71807
UniProt ID:	<a href="#">Q3UQ84</a>
Cytogenetics:	3 F2.1
MW:	82.2 kDa
Gene Summary:	Catalyzes the attachment of threonine to tRNA(Thr) in a two-step reaction: threonine is first activated by ATP to form Thr-AMP and then transferred to the acceptor end of tRNA(Thr). Also edits incorrectly charged tRNA(Thr) via its editing domain.[UniProtKB/Swiss-Prot Function]