

Product datasheet for **MG217485**

Tars2 (NM_027931) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tars2 (NM_027931) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tars2
Synonyms:	2610024N01Rik; AI429208; Tarsl1; thrRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG217485 representing NM_027931
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGGTCTCTGTCTGAGGTGGCGCCGGCTTGGGTTCCCACTCCCAGAGTTCGCCCGCTGCGAGCTCCACA
CCGTGCGTGAGGCCTCTGCACCAACTCCTCCACATTGGTTGGCAGAACGATTTGGCCTTTTTGAGGAGCT
ATGGACCCTCACGTGAAAAAGTTAGCAAGTATGACACAGAAGAAAGCCCGGGCTATTAAGATATCACTT
CCTGAAGGCCAGAAGGTAGATGCTGTTGCATGGAACACAACCCCTTACCAACTGGCCATCAGATCAGTG
TAACACTGGCTGATACTGCAGTGGCTGCTGAAGTAAATGGAGAAGTTTACGATCTGGACCGACCTTGG
GACAGATTGTACCTCAGATTTCTGACATTTGATTCCCCAGAGGGCAAAGCGGTGTTCTGGCACTCTAGT
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CGGGCTTTTACCATGACTTCTTCTGGGAAAAGAACGGACAGTCCGCAGCGCAGAGTTGCCATTTTAGA
GCGGATTTGCCAGGAGCTCATAGCTGCTGCACAGCCTTTCGGAGGCTGGAGGCTTCACGGGATCAGCTT
CGCCAGCTCTTCAAGGACAACCACTTTAAGCTTCACTGATCGAGGAGAAAGTGACAGGCCAACCGCAA
CAGTGTATGGGTGTGGCATGTCAGTTGACCTGTGCCGAGGCCCCATCTTCGGCACACTGGACAGATTGG
AGCACTGAAGCTGCTCACGAACCTCTCAGCCTTGTGGAGGTCTTGGGAGCACCTGAGACACTGCAGAGG
GTATCAGGAATTTCTTTCCCAAAGTAGAGTACTGAGGAACTGGGAAGCTCGAAGAGAAGCAGCAGAGT
TAAGAGACCACAGACGCATTGGGAAGGAACAGGAGCTCTTCTTCCATGAACTGAGCCCTGGGAGCTG
TTTTTCTTGGCCAGGAGGACAAGATCTATAATGCCCTGGTGGCTTTCATCAGGGCTGAGTATGCCCGC
CGTGGTTTCTCAGAGGTGAAAACCTCCACGCTGTTTTCTACAAAACCTCTGGGAACAGTCAAGGCACTGGG
AACACTATAGGGCAGACATGTTTTCCCTGAAGCCCTTGGCACTGATGGTGTGACAACCTCCAGAGTGG
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TGGGGCTTCTATGGGCCTAAGATTGATGTGCACCTCCACGACGCCCTTGGTCGGCCCATCAGTGTGGA
ACAATCCAGCTTGACTTCCAGCTGCCACTGAGATTTGACCTACAATAAAGGGGCCGCGCAGTACCCCG
AGTGTCCAGTCTTATTCATCGAGCAGTCTTGGTTCTGTGGAAGGCTGTTGGGAGTGCTGGCAGAAAG
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GAGGAATATGCCAGGCAGGTGCAACAGTGCCTGCAGGCTGCAGGACTTGTGAGTATCTCGATGCAGACT
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CCAGAGAGAGCAGAGTCAAAGGACAGTGAACGTACGCACGCGAGATAACCGGCAGCTCGGGGAGCGAGAC
CTGGCCGAGTCCGTGCAGAGACTGCTGGAGTTACAGAACGCCAGGGTCCCAATGCAGAAGAAGTGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG217485 representing NM_027931
Red=Cloning site Green=Tags(s)

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MGLCLRWRRLGFPLPEFRRCCELHTVREASAPTPPHWLAERFGLFEELWTAHVKKLASMTQKKARAIKISL
PEGQKVDAAVWNTTPYQLAHQISVTLADTAVAAEVNGLYDLDRPLETDCHLRFLTFDSPGKAVFWHSS
AHVLGAAAEQQLGAVLCRGPSTESGFYHDFFLGKERTVRSaelPILERICQELIAAAQPFRRLASRDQL
RQLFKDNHFKLHLIEEKVTGPTATVYGCMSVDLCRGPHLRHTGQIGALKLLTNSSALWRSLGAPETLQR
VSGISFPKVELLRNWEARREAELRDHRRIGKEQELFFHELSPGSCFFLPRGTRVYNALVAFIRAEYAR
RGFSEVKTPTLFSTKLWEQSGHWEHYRADMFSLKPPGTDGVDNSQSGHPARCPKDTLALKPMNCPAHCLM
FAHRPRSWREL PVRLADFGALHRAEASGSLGGLTRLWRFQDDAHIFCAPHQLEAEIQGCLDFLRVYVS
LGF SFHLALSTRPPGFLGEPRLWDQAEQVLQQALEKFGEPWDLNPGDGA FYGPKIDVHLHDALGRPHQCG
TIQLDFQLPLRFDLQYKGPAGTPECPVL IHRAVLGSVERLLGVLAE SCGGKWPLWLSPLQVVVIVRTEQ
EEYARQVQQLQAAGLVSDL DADSGTL SRRVRAQLAHYNFQFVVGQREQSQR TVNVRTDRNRLGERD
LAESVQRLLLELQNARVPNAEEVF
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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

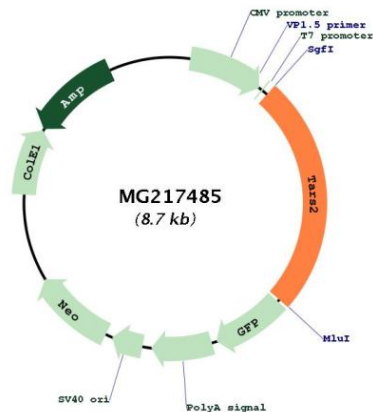
Locus ID: 71807

UniProt ID: [Q3UQ84](#)

Cytogenetics: 3 F2.1

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]

Product images:



Circular map for MG217485