

Product datasheet for **MG218725**

Tars2 (NM_001163617) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tars2 (NM_001163617) 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:

>MG218725 representing NM_001163617
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTCTCTGTCTGAGGTGGCGCCGGCTTGGGTTCCCACTCCCAGAGTTCGCCCGCTGCGAGCTCCACA
 CCGTGCGTGAGGCCTCTGCACCAACTCCTCCACATTGGTTGGCAGAACGATTTGGCCTTTTTGAGGAGCT
 ATGGACCCTCACGTGAAAAAGTTAGCAAGTATGACACAGAAGAAAGCCCGGGCTATTAAGATATCACTT
 CCTGAAGGCCAGAAGGTAGATGCTGTTGCATGGAACACAACCCCTTACCAACTGGCCCATCAGATCAGTG
 TAACACTGGCTGATACTGCAGTGGCTGCTGAAGTAAATGGAGAAGTTTACGATCTGGACCGACCTTGGG
 GACAGATTGTACCTCAGATTTCTGACATTTGATTCCCCAGAGGGCAAAGCGGTGTTCTGGCACTCTAGT
 GCCCATGTTCTGGGGCTGCGGCTGAGCAACAAGTGGTGTCTCTGCGGAGGTCCAAGCACAGAAT
 CGGGCTTTTACCATGACTTCTTCTGGGAAAAGAACGGACAGTCCGCAGCGCAGAGTTGCCATTTTAGA
 GCGGATTTGCCAGGAGCTCATAGCTGCTGCACAGCCTTTCCGGAGGCTGGAGGCTTCACGGGATCAGCTT
 CGCCAGCTCTTCAAGGACAACCACTTTAAGCTTCACTGATCGAGGAGAAAGTGACAGGCCAACCGCAA
 CAGTGTATGGGTGTGGCATGTCAGTTGACCTGTGCCGAGGCCCCATCTTCGGCACACTGGACAGATTGG
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 CTTGGTTTTCTTCCACCTGGCTTATCTACCCGGCCACCTGGTTTTCTAGGGGAGCCTCGCCTATGGG
 ACCAGGCTGAGCAGATTGATGTGCACCTCCACGACGCCCTTGGTCGGCCCATCAGTGTGGAACAATCCA
 GCTTGACTTCCAGCTGCCACTGAGATTTGACCTACAATAAAGGGGCCGGCAGGTACCCAGAGTGTCCA
 GTCCTTATTCATCGAGCAGTGTGTTGTTCTGTGAAAGGCTGTTGGGAGTCTGGCAGAAAGCTGTGGGG
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 TGCCAGGCAGGTGCAACAGTGCCTGCAGGCTGCAGGACTGTGAGTGATCTCGATGCAGACTCTGGACTG
 ACCCTCAGCCGGAGAGTCCGCCGGGCCAGCTTGGCCACTACAACCTTTCAGTTTGTGGTTGGCCAGAGAG
 AGCAGAGTCAAAGGACAGTGAACGTACGCACGCGAGATAACCGGCAGCTCGGGGAGCGAGACCTGGCCGA
 GTCCGTGCAGAGACTGCTGGAGTTACAGAACGCCAGGGTCCCAATGCAGAAGAAGTGTTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG218725 representing NM_001163617
 Red=Cloning site Green=Tags(s)

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MGLCLRWRRLGFPLPEFRRCLEHTVREASAPTPPHWLAERFGLFEELWTAHVKKLASMTQKKARAIKISL
PEGQKVDVAWNTTPYQLAHQISVTLADTAVAAEVNGLYDLDRPLETDCHLRFLTFDSPGKAVFWHSS
AHVLGAAAEQQLGAVLCRGPSTESGFYHDFLLGKERTVRSALPILERICQELIAAAQPFRRLEASRDQL
RQLFKDNHFKLHLIEEKVTGPTATVYGCMSVDLCRPHLRHTGQIGALKLLTNSSALWRSLGAPETLQR
VSGISFPKVELLRNWEARREAAELRDHRRIGKEQELFFHELSPGSCFFLPRGTRVYNALVAFIRAEYAR
RGFSEVKTPTLFSTKLWEQSGHWEHYRADMFSLKPPGTDGVDNSQSGHPARCPKDTLALKPMNCPAHCLM
FAHRPRSWREL PVRLADFGALHRAEASGSLGGLTRLWRFQDDAHIFCAPHQLEAEIQGCLDFLRVYVS
LGFSFHLALSTRPPGFLGEPRLWDQAEQIDVHLHDALGRPHQCGTIQLDFQLPLRFDLQYKGPAGTPECP
VLIHRAVLGSVERLLGVLAESCGKWPLWLSPLQVVVIVRTEQEEYARQVQQCLQAAGLVSDLADDSGL
TLRRVRRRAQLAHYNFQFVVGQREQSQRTVNVTRDRNRQLGERDLAESVQRLELQNAVNPAAEEVF
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TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001163617

ORF Size: 2091 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_001163617.1](#), [NP_001157089.1](#)

RefSeq Size: 2446 bp

RefSeq ORF: 2094 bp

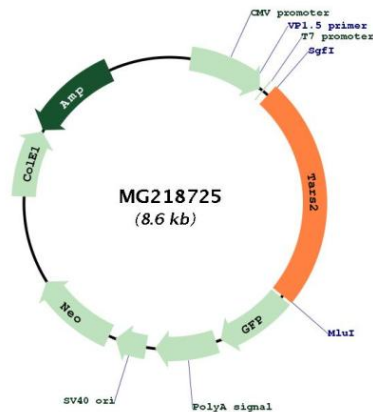
Locus ID: 71807

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 MG218725