

Product datasheet for **MR217503**

Tars2 (NM_001163618) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tars2 (NM_001163618) 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



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ORF Nucleotide
Sequence:

>MR217503 representing NM_001163618
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGTCTCTGTCTGAGGTGGCGCCGGCTTGGGTTCCCACTCCCAGAGTTCGCCCTGCGAGCTCCACA
CGGTGCGTGAGGCCTCTGCACCAACTCCTCCACATTGGTTGGCAGAACGATTTGGCCTTTTTGAGGAGCT
ATGGACCCTCACGTGAAAAAGTTAGCAAGTATGACACAGAAGAAAGCCCGGGCTATTAAGATATCACTT
CCTGAAGGCCAGAAGGTAGATGCTGTTGCATGGAACACAACCCCTTACCAACTGGCCATCAGATCAGTG
TAACACTGGCTGATACTGCAGTGGCTGCTGAAGTAAATGGAGAAGTTTACGATCTGGACCGACCCTTGA
GACAGATTGTACCTCAGATTTCTGACATTTGATCCCCAGAGGGCAAAGCGGACAACCACTTTAAGCTT
CATCTGATCGAGGAGAAAGTGACAGGCCAACGGCAACAGTGTATGGGTGGCATGTGAGTTGACCTGT
GCCGAGGCCCCATCTTCGGCACACTGGACAGATTGGAGCACTGAAGCTGCTCACGAAGCTCTCAGCCTT
GTGGAGTCTTGGGAGCACCTGAGACTGCAGAGGGTATCAGGAATTTCTTTCCCAAAGTAGAGTTA
CTGAGGAACTGGGAAGCTCGAAGAGAAGCAGCAGATTAAGAGACCACAGACGCATTGGGAAGGAACAGG
AGCTCTTCTTCTCCATGAACTGAGCCCTGGGAGCTGTTTTTCTTGCCACGAGGGACAAGAGTCTATAA
TGCCCTGGTGGCTTTCATCAGGGCTGAGTATGCCCGCCGTGGTTTCTCAGAGGTGAAAACCTCCACGCTG
TTTTCTACAAAACCTGGGAACAGTCAGGGCACTGGGAACACTATAGGGCAGACATGTTTTCCCTGAAGC
CCCCTGGCACTGATGGTGTGACAACCTCCAGAGTGGCCATCCTGCCAGGTGTCCCAAAGACACACTTGC
TCTAAAGCCATGAACTGCCCTGCACACTGCCTGATGTTTGGCCACCGGCCAGATCCTGGAGGGAACTG
CCTGTGCGACTGGCTGATTTTCGGAGCCCTGCATCGGGCTGAGGCCCTGCGCAGTCTGGGAGGATTAACGC
GGCTGTGGCGCTTCCAGCAGGATGATGCGCACATCTTTTGTGCACCCCATCAGCTGGAAGCAGAGATCCA
GGGCTGCCTTGATTTTCTCCGGTGTGTTACTCGGTTCTTGTTTTTCTTCCACCTGGCTTTATCTACC
CGGCCACCTGTTTTCTAGGGGAGCCTCGCCTATGGGACCAGGCTGAGCAGGTTCTACAGCAAGCCTTGG
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TTTGACCTACAATAACAAGGGCCGGCAGGTACCCAGAGTGTCCAGTCTTATTCATCGAGCAGTGTCTG
GTTCTGTGAAAGGCTGTTGGGAGTGTGGCAGAAAGCTGTGGGGGAAATGGCCCTGTGGCTGTCCCC
GCTCCAGGTGGTGGTATCCCTGTGAGGACAGAGCAAGAGGAATATGCCAGGCAGGTGCAACAGTGCCTG
CAGGCTGCAGGACTTGTGAGTATCTCGATGCAGACTCTGGACTGACCCTCAGCCGGAGAGTCCGCCGGG
CCCAGCTTGCCCACTACAACCTTTCAGTTTGTGGTTGGCCAGAGAGCAGAGTCAAAGGACAGTGAACGT
ACGCACCGGAGATAACCGGCAGCTCGGGGAGCGAGACCTGGCCGAGTCCGTGCAGAGACTGCTGGAGTTA
CAGAACGCCAGGGTCCCAATGCAGAAGAAGTGTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217503 representing NM_001163618
 Red=Cloning site Green=Tags(s)

MGLCLRWRRLGFPLPEFRRCCLHTVREASAPTPPHWLAERFGLFEELWTAHVKKLASMTQKKARAIKISL
 PEGQKVDAAVWNTTPYQLAHQISVTLADTAVAAEVNGLYDLDRPLETDCHLRFLTFDSPEGKADNHFKL
 HLIEEKVTGPTATVYGCMSVDLCRPHLRHTGQIGALKLLTNSSALWRSLGAPETLQRVSGISFPKVEL
 LRNWEARREAAELRDHRRIGKEQELFFHELSPGSCFFLPRGTRVYNALVAFIRAEYARRGFSEVKPTPL
 FSTKLWEQSGHWEHYRADMFSLKPPGTDGVDNSQSGHPARCPKDTLALKPMNCPAHCLMFAHRPRSWREL
 PVRLADFGALHRAEASGSLGGLTRLWRFQDDAHIFCAPHQLEAEIQGCLDFLRCVYSVLGFSFHLALST
 RPPGFLGEPRLWDQAEQVLQQALEKFGPEWDLNPGDGFYGPIDVHLHDALGRPHQCGTIQLDFQLPLR
 FDLQYKGPAGTPECPVLIHRAVLGSVERLLGVLAE SCGGKWLWLSPLQVVVIVPRTEQEEYARQVQQCL
 QAAGLVSDLDADSGTL SRRVRRALAHYNFQFVVGQREQSQRTVNVVTRDNRQLGERDLAESVQRLEL
 QNARVPNAEEVF

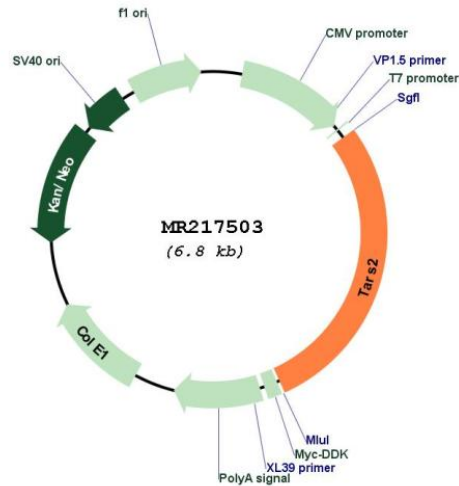
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001163618

ORF Size: 1926 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_001163618.1](#), [NP_001157090.1](#)

RefSeq Size: 2281 bp

RefSeq ORF: 1929 bp

Locus ID: 71807

UniProt ID: [Q3UQ84](#)

Cytogenetics: 3 F2.1

MW: 73 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]