

## Product datasheet for **MG207535**

### **Yars2 (NM\_198246) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Yars2 (NM_198246) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Yars2
Synonyms:	2210023C10Rik; tyrRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207535 representing NM\_198246  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGCGCCCATGCTGAGGCGCTGTGCCGCTTCCGCAGTCCCTGGTCTGGCTACGAGGGTCGCGTG  
 CGGTGCGCCCGGCGCGCGGGGAATGCTGGTGGCACCGAGGGCCCGCGGCTTGTTC AAGGAGTCTTCCC  
 CGAGAGCGGCACGAAGACAGAGCTCCCCGAACCTTTGACCGCCGAGGGCGGGCTCGTCCCCCAGACG  
 GTGTA CTGCGGCTTCGACCCACGGGCGACTCGCTCCACGTGGGGCACCTGCTAACTCTGTTGGGCTCT  
 TCCACTTCCAGCGAGCCGCCACAACGTGATCGCGCTCGTGGGAGGCTCCACGGCCCTCTGGGGGACCC  
 CAGCGGCCGACCAAGGGGCGCGAGGCGCTGAGCGCCGAGTGCCTGCGGGCCAACGCGCACGCCCTGCGG  
 CGAGGGCTCGAGGCCCTGGCGGCAACCACGCGCCCTTTCGCGGACGGCCGGCCCTGGGGCTTTTCA  
 CGGTGCTGGACAACGCGGCTGGTTCCAGGAGCAGCACCTGGTGGATTTCTGGCCACGGTGGGCGGCCA  
 CTTCCGCATGGGCACTCTGCTGAGCCGGCTGAGCGTGCAGTCCGCTCTCAAGAGCCCGAGGGCATGAGC  
 TTGGCGGAGTTCTTTTACCAGGTGCTCCAGGCCTATGACTTCTACTACCTTTTCCAGCACTATGGATGCC  
 GGGTCCA ACTGGGCGGATCAGATCAGTTGGGCAACATCATGTCTGGCTACGAGTTCATCCACAAGTTGAC  
 TGGAGAGGATGTGTTTGGAACTACTGTACTCTAATTACAAGTACA ACTGGAGCAAAGCTGGGAAAGTCT  
 GCTGGCAATGCGGTTTGGCTAACAGAGAGAAAACATCACCGTTTGAAC TTTATCAGTCTTTGTGACAG  
 AGCAAGATGATTCGTAAGAAAGTACCTGAAGCTTTTCACTTTCCCTCCCAGAGATCGATCACAT  
 CATGCAGCTACATGTCAAAGAACCAGAAAAGCGAGTTGCTCAGAAACGACTTGTGCAGAAGTAAACAAG  
 CTTGTTACGGACAAGAAGGTCTGGACTCTGCTAAAAGGTGTACACAAGCCCTTTACCATAGCAGCATAG  
 AGGCACTGGAGTCTGCTGACCAAGAGTTAAAAGATTGTTTAAAGAAGCTTCATTTTCTGAATTAG  
 TCTTGATCCTGGAACGAGTGCATAGACACATGCCGTAAGCAAATGCCATTCTGATGGCCCTCGAGGG  
 TATCGGATGATAACAGAAGGTGGAGTCAGTATAAATCACAGACAGGTAACAAATCCTGAAAGTGTCTAG  
 TAATTGGACAACATATTCTCAAGAATGGACTTTCTTACTTAAAA TAGGAAAAAGGAATTTCTACATTAT  
 AAAATGGCTTCAGTTG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207535 representing NM\_198246  
 Red=Cloning site Green=Tags(s)

MAAPMLRRLCRVPQSLVWLRGSRVPRGARGMLVAPRARGLFKEFFPESGKTELPELFD RRRRAGSSPQT  
 VYCGFDPTGDSLHVGHLLTLLGLFHFQRAGHNVIALLVGGSTALLGDPSGR TKGREALSAECVRANAHALR  
 RGLEALANHARL FADGRPWGSFTVLDNAAWFQEQHLVDFLATVGGHFRMG TLLSRLSVQSRLKSPEGMS  
 LAEFFYQVLQAYDFYLLFQHYGCRVQLGGSDQLGNIMSGYEF IHKLTGEDVFGITVPLITSTTGAKLGKS  
 AGNAVWLNREKTS PFELYQFFVRQQDDSVRYLKLFTFLPLPEIDHIMQLHVKEPEKRVAQKRLAAEVTK  
 LVHGQEGLD SAKRCTQALYHSSIEALEVMSDQELKELFKEASFSELVLDPGT SVIDTCR KANAIPDGPRG  
 YRMITEGGVSI NHRQVTNPESVLVIGQHILKNGLSLLKIGKRNFYI IKWLQL

**TRTRPLE** - GFP Tag - V

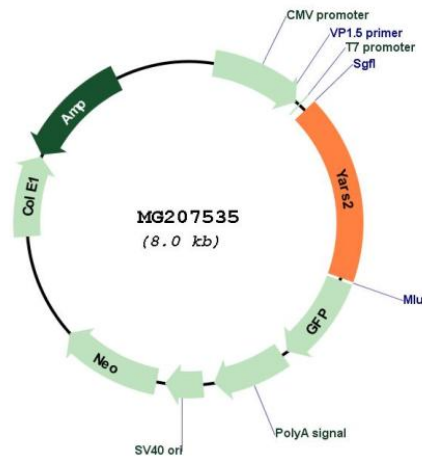
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_198246

ORF Size: 1416 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\\_198246.2](#), [NP\\_937889.1](#)

**RefSeq Size:** 1587 bp

**RefSeq ORF:** 1419 bp

**Locus ID:** 70120

**UniProt ID:** [Q8BYL4](#)

**Cytogenetics:** 16 A2

**Gene Summary:** Catalyzes the attachment of tyrosine to tRNA(Tyr) in a two-step reaction: tyrosine is first activated by ATP to form Tyr-AMP and then transferred to the acceptor end of tRNA(Tyr). [UniProtKB/Swiss-Prot Function]