

Product datasheet for **RR204538**

Yars2 (NM_001009627) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Yars2 (NM_001009627) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Yars2
Synonyms:	CGI-04; RGD1311696
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR204538 representing NM_001009627
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCGCCCATGCTGAGACACCTGTGCCCGTTCGCGAGTCAGGGTCTGGACACGGGGCCGCGTG
 CGGTGCGCCCTGGCGCGGGGAATGTTGGTGGCACCAAGGGCCCGCGCCTGTTCAAGGAGTCTTCCC
 CGAGAGCGGCACGAAGACAGAGCTCCCCAACTCTTTGACCGCCGAGGGCGGGTTCGCCCCAGACTGTG
 TACTGCGGTTTCGACCCACGGGCGATTGCTGCACGTGGGGCACCTGTTAACTTTATTGGGTCTGTTCC
 ACTTCCAGCGAGCCGCCACAACGTGATCGCGCTCGTGGGAGGCTCCACGGCTCTCTGGGAGACCCAG
 CGGCCGACCAAGGAGCGGAGGCGCTGAGCGCTGAGTGCCTGCGGGCAACGCGCGCCCTGCAGCGA
 GGGCTGGAGACCTTGGCGCCAACCACGCGCCCTCTTCGCGGACGGCGGCCCTGGGGCACTTTCACGG
 TGCTCGACAATGCAGCCTGGTTCAGAAGCAGCACCTAATGGATTTTCTGGCCACGGTGGCGGCCACTT
 CCGCATGGGCACTCTGCTTAGCCGGCTGAGCGTGCAGTCCGCTCAAGAGCCCAGAGGGCATGAGCTTG
 GCTGAGTCTTTTACCAGGTGCTCCAGGCTATGACTTCTACTACCTTTTCCGGCACTATGGATGCCGGG
 TCCAGCTGGGCGGATCAGATCAGTTGGCAACATCATGTCTGGCTACGAGTTTATCCACAAGTTGACTGG
 AGAAGATGTGTTTGAATCACTGTACCTTAATTACAAGTACAACCTGGAGCGAAGCTGGGAAAGTCTGCT
 GGCAACCGGTTTGGCTAAACAGAGAGAAAACATCTCCGTTTGAACCTTTACCAGTTCTTTATCAGACAGC
 AAGATGATTCTGTAGAAAGGTACCTGAAGCTTTTCACTTTCCTTCCCCTCCAGAGATTGATCATATTAT
 GCAGCTACATGTCAAAGAACCAGAAAAGCGAATTGCTCAGAAACGACTTGCTGCAGAAAGTAAACAAGCTT
 GTTCATGGACAAGAAGGTCTGGACTCTGCGAAAAGGTGACACAAGCCCTTACCATAGCAGCATAGAGG
 CACTGGAGGTGATGCTGACCAAGAGTTAAAGGAATTGTTTAAAGAAGCTTCATTTTCTGAATTAGTCT
 TGACCCTGGAACGAGTGTATAGACACATGCCGTAAGCAAAATGCCATTCTGATGGTCCCGGAGGGTAT
 CGGATGATCACAGAAGGTGGAGTCAGTATAAATCACAGACAGGTAACAAATCCTGAAAGTGTTTTAGTAA
 TTGGACAACATATTCTCAAGAATGGACTTTCCTTACTTAAATAGGAAAAGGAATTTCTACATTATAAA
 ATGGCTTCAGTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR204538 representing NM_001009627
 Red=Cloning site Green=Tags(s)

MAAPMLRHLCRVPQSGVWTRGPRAVRPGARGMLVAPRARGLFKEFFPESGKTELPELFDRRRAGSPQTV
 YCGFDPTGDSLHVGHLLTLLGLFHFQRAGHNVIALVGGSTALLGDPSGRKEREALSAECVRANARALQR
 GLETLAANHARLFADGRPWGTFVLDNAAWFQKQHLMDFLATVGGHFRMGTLTLLSRLSVQSRLKSPGMSL
 AEFYQVLQAYDFYYLFRHYGCRVQLGSDQLGNIMSGYEFIHKL TGEDVFGITVPLITSTTGAKLGKSA
 GNAVWLNREKTS PFEL YOFF IRQQDDSVERYLKLFTFLPLPEIDHIMQLHVKEPEKRIAQKRLAAEVTKL
 VHGEGLDSAKRCTQALYHSSIEALEVMSDQELKELFKEASFSELVLDPGT SVIDTCRKANAI PDGPRGY
 RMITEGGVSINHRQVTNPESVLVIGQHILKNGLSLLKIGKRNFYIIKWLQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

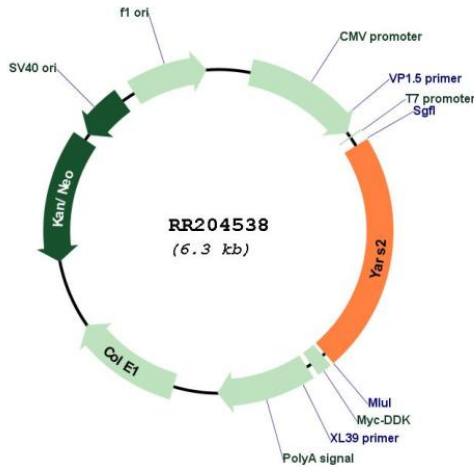
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001009627

ORF Size: 1413 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_001009627.1](#), [NP_001009627.1](#)

RefSeq Size: 1588 bp

RefSeq ORF: 1416 bp

Locus ID: 287924

UniProt ID: [Q5I0L3](#)

Cytogenetics: 11q23

MW: 52.6 kDa

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]