

Product datasheet for **RG238476**

HARS1 (NM_001289094) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HARS1 (NM_001289094) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HARS1
Synonyms:	CMT2W; HARS; HRS; USH3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238476 representing NM_001289094. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGATCGAGGAGGAGGTGGCGAACTCCTGAACTGAAGGCACAGCTGGGTCTGATGAAAGCAAACAG
AAATTTGTGCTCAAACCCCAAGGCCACAAGAGACTATAGTCCCGGCAGATGGCAGTTCGCGAGAAG
GTGTTTGACGTAATCATCCGTTGCTTCAAGCGCCACGGTGCGAAGTCAATGATACACCTGTATTTGAA
CTAAAGGAAACACTGATGGGAAAGTATGGGGAAGACTCCAAGCTTATCTATGACCTGAAGGACCAGGGC
GGGAGCTCCTGTCCTTCGCTATGACCTCACTGTTCTTTTGTGCGTATTTGGCAATGAATAAAGT
ACCAACATTAACGCTACCACATAGCAAAGGTATATCGGCGGGATAACCCAGCCATGACCCGTGGCCGA
TACCGGGAATTCACCAGTGTGATTTTGACATTGCTGGGAACTTTGATCCCATGATCCCTGATGCAGAG
TGCTGAAGATCATGTGCGAGATCCTGAGTTCAGTTCAGATAGGCGACTTCTGGTCAAGGTAAACGAT
CGACGCATTCTAGATGGGATGTTTGCTATCTGTGGTGTCTGACAGCAAGTTCGGTACCATCTGTCTCC
TCAGTAGACAAGCTGGACAAGGTGTCTGGGAAGAGGTGAAGAATGAGATGGTGGGAGAGAAGGGCCTT
GCACCTGAGGTGGCTGACCGCATTTGGGACTATGTCCAGCAACATGGTGGGGTATCCCTGGTGGAAACAG
CTGCTCCAGGATCCTAAACTATCCAAAACAAGCAGGCCTTGGAGGGCCTGGGAGACCTGAAGTTGCTC
TTTGAGTACCTGACCCTATTTGGCATTGATGACAAAATCTCCTTTGACCTGAGCCTTGTCTGAGGGCTG
GATTACTACACTGGGGTATCTATGAGGCAGTGTCTACAGACCCAGCCAGGAGGAGAGAGCC
CTGGGTGTGGCAGTGTGGCTGCTGGAGGACGCTATGATGGGCTAGTGGGCATGTTTCGACCCCAAAGGG
CGCAAGGTGCCATGTGTGGGCTCAGCATTGGGGTGGAGCGGATTTTCTCCATCGTGAACAGAGACTA
GAGGCTTTGGAGGAGAAGATACGGACCAGGAGACACAGGTGCTTGTGGCATCTGCACAGAAGAAGCTG
CTAGAGGAAAGACTAAAGCTTGTCTCAGAACTGTGGGATGCTGGGATCAAGGCTGAGCTGCTGTACAAG
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GGCGAGCAGGAACTCAAGGATGGGGTATCAAGCTCCGTTCAAGTACGAGCAGGGAAGAGGTGGATGTC
CGAAGAGAAGACCTTGTGGAGGAAATCAAAGGAGAACAGGCCAGCCCTCTGCATCTGC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG238476
 Blue=ORF Red=Cloning site Green=Tag(s)

MIEEEVAKLLKLAQLGPDESKQKFLVLTTPKGTDRDYSRQMAVREKVFVDVIIRCFKRHGAEVIDTPVFE
 LKETLMGKYGEDSKLIYDLKDQGGELLSLRYDLVTFARYLAMNKLNIKRYHIKVVYRRDNPAMTRGR
 YREFYQCDFDIAGNFDPMIPDAECLKIMCEILSSLQIGDFLVKVNDRRILDGMFAICGVSDSKFRTICS
 SVDKLDKVSWEVKNEMVGEKGLAPEVADRIGDYVQHGGSVSLVEQLLQDPKLSQNKQALEGLGDLKLL
 FEYLTFLGIDDKISFDLSLARGLDYYTGVYIEAVLLQTPAQAGEEPLGVGSVAAGGRYDGLVGMFDPKG
 RKVPCVGLSIGVERIFSIIVEQRLEALEEKIRTTETQVLVASAQKKLLEERLKLVELWDAGIKAELLYK
 KNPKLLNLQYCEEAGIPLVAIIGEQLKDGVIKLRSVTSREEVDVRRDLVEEIKRRTGQPLCIC
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001289094

ORF Size: 1440 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.

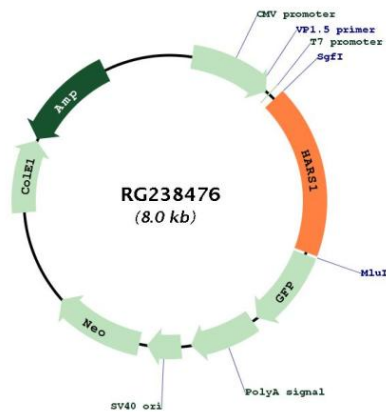
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

RefSeq: [NM_001289094.1](#), [NP_001276023.1](#)

RefSeq Size: 2219 bp
RefSeq ORF: 1443 bp
Locus ID: 3035
Cytogenetics: 5q31.3
Protein Pathways: Aminoacyl-tRNA biosynthesis
MW: 54.7 kDa

Gene Summary: Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. The protein encoded by this gene is a cytoplasmic enzyme which belongs to the class II family of aminoacyl-tRNA synthetases. The enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. The gene is located in a head-to-head orientation with HARS1 on chromosome five, where the homologous genes share a bidirectional promoter. The gene product is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

Product images:



Circular map for RG238476