

Product datasheet for **RG238219**

HARS1 (NM_001289092) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HARS1 (NM_001289092) 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:	>RG238219 representing NM_001289092. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
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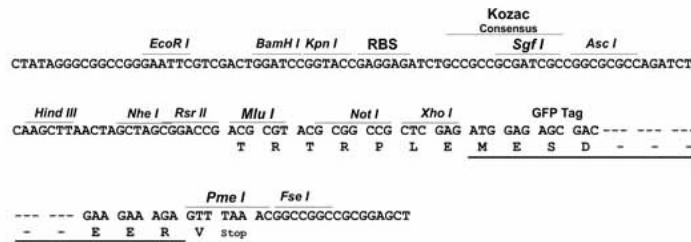
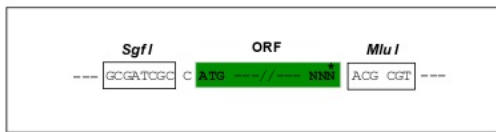
Protein Sequence: >Peptide sequence encoded by RG238219
 Blue=ORF Red=Cloning site Green=Tag(s)

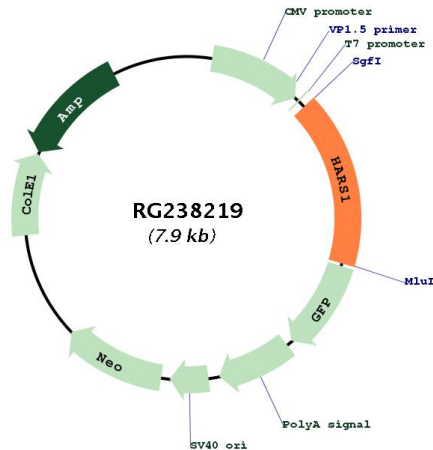
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Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001289092

ORF Size: 1305 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_001289092.1](#), [NP_001276021.1](#)

RefSeq Size: 2100 bp

RefSeq ORF: 1308 bp

Locus ID: 3035

Cytogenetics: 5q31.3

Protein Pathways: Aminoacyl-tRNA biosynthesis

MW: 49 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 HARSL 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]