

## Product datasheet for **SC336113**

### **HARS1 (NM\_001289092) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HARS1 (NM_001289092) Human Untagged Clone
Tag:	Tag Free
Symbol:	HARS1
Synonyms:	CMT2W; HARS; HRS; USH3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC336113 representing NM_001289092. Blue=Insert sequence Red=Cloning site Green=Tag(s)

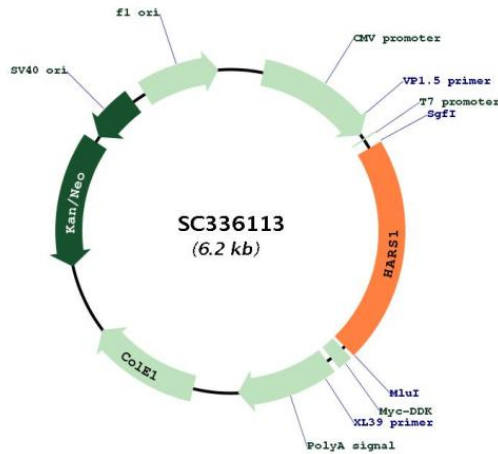
```
GCTCGTTTGTAGTAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCAGAGCGTGCGGCGCTGGAGGAGCTGGTAAACTTCAGGGAGAGCGCGTGCGAGGCCCTCAAGCAG
CAGAAGGCCAGCGCCGAGCTGATCGAGGAGGAGGTGGCGAACTCCTGAAACTGAAGGCACAGCTGGGT
CCTGATGAAAGCAAACAGAAATTTGTGCTCAAACCCCAAGGGCACAAGAGACTATAGTCCCCGGCAG
ATGGCAGTTTCGCGAGAAGGTGTTTGACGTAATCATCCGTTGCTTCAAGCGCCACGGTGCAGAAGTCATT
GATACACCTGATTTGAACTAAAGGATTTGACATTGCTGGAACTTTGATCCCATGATCCCTGATGCA
GAGTGCCTGAAGATCATGTGCGAGATCCTGAGTCACTTCAGATAGGCGACTTCCCTGGTCAAGGTAAC
GATCGACGATTCTAGATGGGATGTTTGTATCTGTGGTGTCTGACAGCAAGTTCCGTACCATCTGC
TCCTCAGTAGACAAGCTGGACAAGGTGTCTGGGAAGAGGTGAAGAATGAGATGGTGGGAGAGAAGGGC
CTTGACCTGAGGTGGCTGACCGCATTGGGGACTATGTCCAGCAACATGGTGGGTATCCCTGGTGGAA
CAGCTGCTCCAGGATCCTAAACTATCCAAAACAAGCAGGCCCTGGAGGGCCTGGGAGACCTGAAGTTG
CTCTTTGAGTACCTGACCCTATTTGGCATTGATGACAAAATCTCCTTTGACCTGAGCCTTGCTCGAGGG
CTGGATTACTACACTGGGGTGTCTATGAGGCAGTGTCTACAGACCCAGCCAGGCAGGGGAAGAG
CCCCTGGTGTGGGCAGTGTGGCTGCTGGAGGACGCTATGATGGGCTAGTGGGCATGTTTCGACCCAAA
GGCGCAAGGTGCCATGTGTGGGCTCAGCATTGGGGTGGAGCGGATTTCTCCATCGTGGAACAGAGA
CTAGAGGCTTTGGAGGAGAAGATACGGACCACGGAGACACAGGTGCTTGTGGCATCTGCACAGAAGAAG
CTGCTAGAGGAAAAGACTAAAGCTTGTCTCAGAACTGTGGGATGCTGGGATCAAGGCTGAGCTGCTGTAC
AAGAAGAACC AAAGCTACTGAACCAGTTACAGTACTGTGAGGAGGCAGGCATCCCACTGGTGGCTATC
ATCGGCGAGCAGGAACTCAAGGATGGGGTCAAGCTCCGTTCAAGTACGAGCAGGGAAGAGGTGGAT
GTCCGAAGAGAAGACCTTGTGGAGGAAATCAAAGGAGAACAGGCCAGCCCTCTGCATCTGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```



[View online >](#)

Restriction Sites: SgfI-MluI

**Plasmid Map:**



ACCN: NM\_001289092

Insert Size: 1308 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001289092.1](#)

RefSeq Size: 2100 bp

RefSeq ORF: 1308 bp

Locus ID: 3035

Cytogenetics: 5q31.3

Protein Pathways: Aminoacyl-tRNA biosynthesis

MW: 48.6 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 HARS2 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]

Transcript Variant: This variant (5) lacks two alternate in-frame exons in the 5' coding region, compared to variant 1. The encoded protein (isoform 5) is shorter, compared to isoform 1.