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Product datasheet for SC102514

HARS2 (NM_012208) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HARS2 (NM_012208) Human Untagged Clone
Tag:	Tag Free
Symbol:	HARS2
Synonyms:	HARSL; HARSR; HisRS; HO3; PRLTS2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC102514 sequence for NM_012208 edited (data generated by NextGen Sequencing)

ATGCCCCTGCTCGGACTTCTTCCCAGGAGGGCCTGGGCTTCGCTGCTCAGCCAGCTCCTG
CGACCGCCCTGCGCTTCGTGCACCGGGGCGGTCCGTTGCCAAAGCCAGGTTGCAGAGGCA
GTGTTAACATCCCAACTGAAAGCACATCAAGAGAAACCAAATTTTATTATCAAGACCCCA
AAGGGTACCAGGGATCTTAGTCCTCAGCATATGGTTGTGAGGGAGAAAATTCTTGATTTG
GTTATCAGCTGCTTTAAACGTCATGGAGCAAAGGGGATGGACACCCCAGCATTTGAGCTG
AAGGAAACCCTGACTGAGAAGTATGGGGAGGACTCTGGGCTCATGTATGATCTGAAGGAT
CAAGGTGGAGAGCTGTTGTCCCTCCGCTATGACCTTACTGTTCCCTTTGCTCGTTATCTG
GCCATGAATAAGGTGAAGAAGATGAAACGTTATCATGTTGGAAAGGTGTGGCGGCGAGAG
AGCCCAACCATAGTCCAAGGCCGTTATAGGGAGTTCTGCCAGTGTGATTTTGACATTGCT
GGTCAGTTTGACCCTATGATCCCCGATGCAGAGTGTTTGAAGATCATGTGTGAAATCCTA
AGTGGATTGCAGTTGGGAGACTTTCTCATTAAGGTAAATGACCGGCGGATTGTGGATGGG
ATGTTTGCTGTCTGTGGTGTTCCTGAAAGCAAGTTCCGTGCCATCTGCTCCTCCATAGAT
AAACTAGACAAGATGGCTTGGAAAGATGTGAGACATGAGATGGTGGTGAAGAAAGGCCTG
GCTCCTGAGGTGGCTGATCGAATTGGGGACTATGTCCAGTGTCATGGTGGGGTATCCCTA
GTAGAGCAAATGTTTCAGGATCCCAGACTATCCCAGAACAAGCAGGCCCTGGAGGGCCTG
GGAGACCTAAAGCTGCTATTTGAATACCTGACTTTATTTGGAATTGCTGATAAGATCTCC
TTTGACCTCAGCCTGGCTCGGGGCCTAGACTACTATACAGGAGTGATCTATGAAGCAGTG
CTGCTGCAGACCCCAACTCAGGCTGGGGAGGAGCCCCTGAATGTGGGCAGTGTGGCTGCT
GGTGGGCGCTATGATGGGCTGGTGGGCATGTTTGACCCCAAGGGCCACAAGGTGCCATGT
GTGGGACTCAGCATTGGGGTTGAGCGAATCTTCTACATTGTGGAGCAGAGGATGAAGACC
AAAGGTGAGAAGGTGCGGACTACAGAGACTCAAGTGTTTGTGGCCACACCACAGAAGAAC
TTTCTCCAAGAACGGTTGAAGCTTATTGCAGAGCTTTGGGATTCTGGAATCAAGGCAGAG
ATGCTATACAAGAACAACCCCAAACTATTAACCCAGCTGCACTATTGTGAGAGCACAGGC
ATTCCACTGGTGGTCATTATTGGTGAGCAAGAACTGAAAGAAGGGGTCATCAAGATCCGT
TCAGTGGCCAGCAGAGAGGAGGTGGCCATTAAACGGGAAAATTTTGTGGCTGAAATTCAG
AAGCGACTGTCTGAGTCTTGA

Clone variation with respect to NM_012208.2
327 a=>g

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012208 unedited
GCATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCTGGCTACTA
AGGGAACTTGGGAGGATCCCACCTCAGCCTTCGTGACTAGTGAGGTGCGCAAACGCCCGA
GTTTTCCCTGGTGCGCGGGTTCCGCCTTTGCAGTGCCCTCCACCCTTCCTGGTGTCTGAC
CCGCCTCCTTCCCAGGCCTTTTGTTCCTGTCCCGGAAAGCCGGCGTCCTGCCGCGCGATG
CCCCTGCTCGGACTTCTTCCCAGGAGGGCCTGGGCTTCGCTGCTCAGCCAGCTCCTGCGA
CCGCCCTGCGCTTCGTGCACCGGGGCGGTCCGTTGCCAAAGCCAGGTTGCAGAGGCAGTG
TTAACATCCCAACTGAAAGCACATCAAGAGAAACCAAATTTTATTATCAAGACCCCAAAG
GGTACCAGGGATCTTAGTCCTCAGCATATGGTTGTGAGGGAGAAAATTCTTGATTTGGTT
ATCAGCTGCTTTAAACGTCATGGAGCAAAGGGGATGGACACCCCAGCATTTGAGCTGAAG
GAAACCCTGACTGAGAAGTATGGGGAGGACTCTGGGCTCATGTATGATCTGAAGGATCAA
GGTGGAGAGCTGTTGTCCCTCCGCTATGACCTTACTGTTCCCTTTGCTCGTTATCTGGCC
ATGAATAAGGTGAAGAAGATGAAACGTTATCATGTTGGAAAGGTGTGGCGGCGAGAGAGC
CCAACCATAGTCCAAGGCCGTTATAGGGAGTTCTGCCAGTGTGATTNTGACATTGCTGGT
CAGTTTGACCCTATGATCCCCGATGCAGAGTGGTTGAAGATCATGTGTGAAATCCTAAGT
GGATTGCAGTTGGGAGACTNTCTCATTAANGGTAATGACCNGCNGATNGTGNATGGGGAT
GTTGCTGTCTTGTGTGTCCTGGAAAGCNAGTNCCGTGCCATCTGCTCTCCTAGATAACTA
GACAGATGCTGGGAAGATG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_012208 unedited
NAAATTTTTGACTNTAGNCCCGCGGNCCCGCTTTCNANNGATCGGTTTTTTTTTTTTTTT
TTTGCACTTAATATTTTATTTAACATGTTATCCAACCACTTTCTAAAACAGCCTCCATGG
CACGGTATGGAATAGAGCAGTGATTCTGGCACAGGAAATGGTCTCCAAAATCTCAAAATA
TCAGATCTCTACCTTGTCAAGTCATCTATTAAGTTCAATGTTCAAGATTATCAAGCATAC
AGCCCCACTCTTCTACTGTAAGCAATGGATGGGCTAGAGAGATGTCAAATCAACATGGGT
ACTGCCATGCCCTTAGGATAGCATCTGTCCTCAAAGCTGAAAGCAGCCATTGCCCCTCTT
TGCTGTCTTCCAAAAACTCCCCAGACAGGCCAATGGCTGATTGTGGACAAATTCACCAGA
ATCTGGTTCCGTAGCTACAGTAGAAGGCTAAGTATCTGGTTTCTGATCTCAATGGTTCAG
AATCCTGAGCCTGAGGTGACTCTCCCAGAGCCTTGCTCACAGCAACAATCTCACTACCTC
TTGACAACGTTCCGTGGCACTTCAAATTTGCCTCTGCAGCTAGAGCATGTCTCTTTCACA
TCCAGCCATCTGCACCCATGCAGAATAGCTGCTCACACTAGCCCAGGAGTCCTCAGGGTC
TTCTACAGTTCTGCACCCAGGAAGAATGGAGGAGGCAGAAGGTACTTGTCACCCTTCCTG
GCTAGTTGTTGTGAAGTCCATCACTCAATTCCAGAGGAATTCAGTTCTAGAGAAAACCTT
TTCTACAAAGAGCAGCAGATGGGAATCANGCAAGGATCAAGACTCAGACAGTCGCTTCTG
AATTTCAGCCACAAAATTTNCCCGTTAATGGCCCACTNCTCTCTGCTGGCCACTGNAACG
GAT

Restriction Sites: NotI-NotI

ACCN: NM_012208

Insert Size: 2550 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_012208.2, NP_036340.1

RefSeq Size: 2508 bp

RefSeq ORF: 1521 bp

Locus ID: 23438

UniProt ID: P49590

Cytogenetics: 5q31.3

Domains: tRNA-synt_2b, HGTP_anticodon

Protein Pathways: Aminoacyl-tRNA biosynthesis

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 an enzyme belonging to the class II family of aminoacyl-tRNA synthetases. Functioning in the synthesis of histidyl-transfer RNA, the enzyme plays an accessory role in the regulation of protein biosynthesis. The gene is located in a head-to-head orientation with HARS on chromosome five, where the homologous genes likely share a bidirectional promoter. Mutations in this gene are associated with the pathogenesis of Perrault syndrome, which involves ovarian dysgenesis and sensorineural hearing loss. Alternative splicing results in multiple transcript variants of this gene. [provided by RefSeq, Jul 2013]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).