

## Product datasheet for RC237990

### DARS1 (NM\_001293312) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DARS1 (NM_001293312) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DARS1
Synonyms:	aspRS; DARS; HBSL
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC237990 representing NM_001293312 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGTTAAATTTGCTGCCAACATCAACAAAGAGAGCATTGTGGATGTAGAAGGTGTTGTGAGAAAAGTGA  
ATCAGAAAATTGGAAGCTGTACACAGCAAGACGTTGAGTTACATGTTCAGAAGATTTATGTGATCAGTTT  
GGCTGAACCCCGTCTGCCCTGCAGCTGGATGATGCTGTTCCGGCCTGAGGCAGAAGGAGAAGAGGAAGGA  
AGAGCTACTGTTAACCAGGATACAAGATTAGACAACAGAGTCATTGATCTTAGGACATCAACTAGTCAGG  
CAGTCTCCGCTCTCCAGTCTGGCATCTGCCATCTCTCCGAGAAACTTTAATTAACAAAGGTTTTGTGGA  
AATCCAACTCCTAAAATTATTTTCAGCTGCCAGTGAAGGAGGAGCCAATGTTTTACTGTGCATATTTT  
AAAAATAATGCATACCTGGCTCAGTCCCCACAGCTATATAAGCAAATGTGCATTTGTGCTGATTTTGAGA  
AGGTTTTCTCTATTGGACCAGTATTAGAGCGGAAGACTCTAATACCCATAGACATCTAACTGAGTTTGT  
TGGTTTGGACATTGAAATGGCTTTTAATTACCATTACCACGAAGTTATGGAAGAAATGCTGACACCATG  
GTACAAATATTTCAAAGGACTTCAAGAAAGGTTTCAGACTGAAATTCAAACAGTGAATAAACAGTTCCCAT  
GTGAGCCATTCAAATTTTGGGCCAACTCTAAGACTAGAATTTGTAAGCATTGGCTATGCTTAGGGA  
AGCTGGAGTCGAAATGGGAGATGAAGACGATCTGAGCACACCAAATGAAAAGCTGTTGGGTCATTTGGTA  
AAGGAAAAGTATGATACAGATTTTTATATTCTTGATAAATATCCATTGGCTGTAAGACCTTTCTATACCA  
TGCTGACCCAAGAAATCCCAAACAGTCCAACCTTACGATATGTTTCATGAGAGGAGAAGAAATATTGTC  
AGGAGCTCAAAGAATACATGATCCTCAACTGCTAACAGAGAGAGCTTTACATCATGGAATTGATTTGGAG  
AAAATTAAGGCTTACATTGATTCCTTCCGCTTTGGAGCCCTCCTCATGCTGGTGGAGGCATTGGATTGG  
AACGAGTTACTATGCTGTTTCTGGGATTGCATAATGTTTCGTCAGACCTCCATGTTCCCTCGTGATCCCAA  
ACGACTCACTCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237990 representing NM\_001293312  
 Red=Cloning site Green=Tags(s)

MVKFAANINKESIVDVEGVVRKVNQKIGSCTQQDVELHVQKIYVISLAEPRLPLQLDDAVRPEAEGEEEG  
 RATVQNQDTRLNDRVIDLRTSTSQAVFRLQSGICHLFRETLINKGFVEIQPKIISAASEGGANVFTVSYF  
 KNNAYLAQSPQLYKQMCICADFEKVF SIGPVFRAEDSNTHRHLTEFVGLDIEMAFNYHYHEVMEEIADTM  
 VQIFKGLQERFQTEIQTVNKQFPCEPFKLEPTLRLEYCEALAMLREAGVEMGEDDLSTPNEKLLGHLV  
 KEKYDADFYLIDKYPLAVRPFYTMPDPRNPKQSNYSYDMFMRGEEILSGAQRHDPQLLTERALHHGIDLE  
 KIKAYIDSFRFGAPPHAGGGIGLERVTMLFLGLHNVRQTSMFPRDPKRLTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

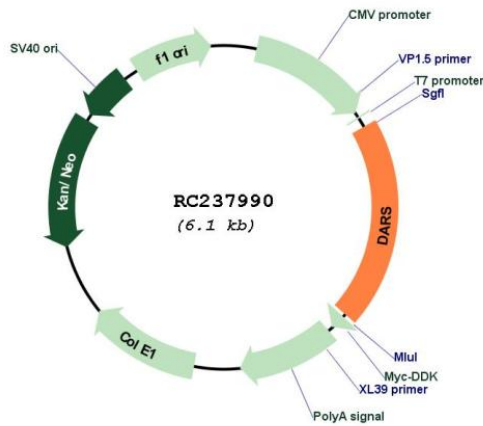
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001293312

<b>ORF Size:</b>	1203 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001293312.1</a> , <a href="#">NP_001280241.1</a>
<b>RefSeq Size:</b>	3113 bp
<b>RefSeq ORF:</b>	1206 bp
<b>Locus ID:</b>	1615
<b>UniProt ID:</b>	<a href="#">P14868</a>
<b>Cytogenetics:</b>	2q21.3
<b>Protein Pathways:</b>	Aminoacyl-tRNA biosynthesis
<b>MW:</b>	46.2 kDa
<b>Gene Summary:</b>	This gene encodes a member of a multienzyme complex that functions in mediating the attachment of amino acids to their cognate tRNAs. The encoded protein ligates L-aspartate to tRNA(Asp). Mutations in this gene have been found in patients showing hypomyelination with brainstem and spinal cord involvement and leg spasticity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]