

## Product datasheet for **RG237990**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DARS1 (NM_001293312) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DARS1
Synonyms:	aspRS; DARS; HBSL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237990 representing NM_001293312. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTTAAATTTGCTGCCAACATCAACAAAGAGAGCATTGTGGATGTAGAAGGTGTTGTGAGAAAAGTG
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CAGGCAGTCTCCGCTCCAGTCTGCCATCTGCCATCTCTCCGAGAACTTTAATTAACAAAGGTTTT
GTGAAATCCAACTCCTAAAATTATTTACAGTCCAGTGAAGGAGGAGCCAATGTTTTACTGTGTCA
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GACACCATGGTACAAATATTCAAAGGACTTCAAGAAAGGTTTCAGACTGAAATCAAACAGTGAATAAA
CAGTCCCAGTGTGAGCCATTCAAATTTTGGAGCCAACCTAAGACTAGAATATTGTGAAGCATTGGCT
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GGTCATTTGGTAAAGGAAAAGTATGATACAGATTTTTATATTCTTGATAAATATCCATTGGCTGTAAAG
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GAAGAAATATTGTCAGGAGCTCAAAGAATACATGATCCTCAACTGCTAACAGAGAGAGCTTTACATCAT
GGAATTGATTTGGAGAAAATTAAGGCTTACATTGATTCCTTCCGCTTTGGAGCCCTCCTCATGCTGGT
GGAGGCATTGGATTGGAACGAGTTACTATGCTGTTTCTGGGATTGCATAATGTTCTGCAGACCTCCATG
TCCCTCGTGATCCCAAACGACTCACTCCT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237990  
 Blue=ORF Red=Cloning site Green=Tag(s)

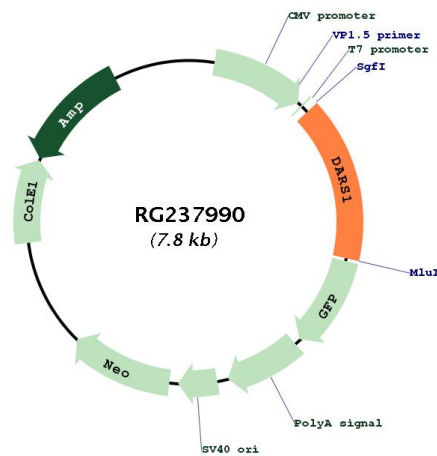
MVKFAANINKESIVDVEGVVRKVNQKIGSCTQQDVELHVQKIYVVISLAEPRLPLQLDDAVRPEAEGEEE  
 GRATVNQDTRLNDRVIDLRTSTSQAVFRLQSGICHLFRETLINKGFVEIQTPKIIISAASEGGANVFTVS  
 YFKNNAYLAQSPQLYKQMCICADFEKVFISGPVFRAEDSNTHRHLETFVGLDIEMAFNYHYHEVMEEIA  
 DTMVQIFKGLQERFQTEIQTVNKQFPCEPFKLEPTLRLEYCEALAMLREAGVEMGDEDDLSTPNEKLL  
 GHLVKEKYDADFYILDKYPLAVRPFYTMPDPRNPKQSNYSYDMFMRGEEILSGAQRIDHPQLLTERALHH  
 GIDLEKIKAYIDSRFRGAPPHAGGGIGLERVTMLFLGLHNVRQTSMPRPDPKRLTP  
**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV**  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNTAVEHLHPMGDNDLDGSFTRTFLSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



<b>ACCN:</b>	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>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]