

## Product datasheet for **RC203961**

### **PARS2 (NM\_152268) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PARS2 (NM_152268) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PARS2
Synonyms:	DEE75; EIEE75; MT-PRORS; proRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC203961 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAAGGGCTGCTGACAAGATGCAGAGCATTGCCCGCCCTGGCCACCTGCAGCCGCCAGCTCTCTGGGT  
 ATGTTCTTGCAGGTTTACCACTGTGCCCAAGAAGAGGGCGGCCTGCTGCTGTCTCGTGTGTCCA  
 GCCACAGAACCTTCGGGAAGACCGGGTGTCTCCCTGCAGGACAAATCTGATGACCTGACCTGTAAGAGC  
 CAGCGGCTGATGCTGCAGGTGGGCTGATCTACCCAGCAAGCCCCGGCTGTTACCACCTCTGCCATATA  
 CCGTCCGTGCCATGGAGAAGCTCGTGCAGTGATAGACCAGGAGATGCAGGCCATCGGGGCCAGAAAGT  
 CAACATGCCAGCCTCAGCCCGCAGAGCTCTGGCAAGCCACCAACCGTGGGACTTGATGGCAAAGAG  
 CTGCTAAGACTTAGAGACAGGCATGGCAAGGAATACTGCTTAGGACCACTCACGAGGAAGCCATTACGG  
 CCTAATTGCCTCCAGAAGAACTGTCTACAAGCAGCTTCCCTTCTGCTGTACCAAGTGACAAGGAA  
 GTTTCGGGATGAGCCAGGCCCGCTTTGGTCTTCTCCGTGGCCGAGAGTTTTACATGAAGGATATGTAC  
 ACCTTTGACTCCTCCCCAGAGGCTGCCAGCAGACCTACAGCCTGGTGTGTGATGCCTACTGCAGCCTGT  
 TCAACAAGCTAGGGCTGCCATTTGTCAAGTCCAGGCCGATGTGGGCACCATCGGGGCACAGTGTCTCA  
 TGAGTTCAGCTCCAGTGGATATTGGAGAGGACCGGCTTGCATCTGTCCCCGCTGCAGCTTCTCAGCC  
 AACATGGAGACTAGACTTGTCAAAATGAACTGCCCTGCTTGGCAGGGCCATTGACTAAAACCAAAG  
 GCATTGAGGTGGGGCACACATTTTACCTGGGTACCAAGTACTCATCCATTTTCAATGCCAGTTTACCAA  
 TGTCTGTGGCAAACCAACCCTGGCTGAAATGGGGTGTATGGCTTGGGTGTGACACGGATCTTGGCTGT  
 GCCATTGAAGTCTCTCTACAGAAGACTGTGTCCGCTGGCCAGCCTACTGGCCCTTACCAAGCCTGCC  
 TCATCCCCCTAAGAAGGGCAGTAAGGAGCAGGGCCCTCCGAGCTCATAGGGCAGCTGTACGACCAT  
 CACAGAGGCAGTGCCTCAGCTTACGGGGAGGTGCTCCTGGACGACAGGACCCATCTGACCATCGGAAAC  
 AGACTGAAAGATGCCAACAAGTTTGGCTACCCCTTTGTGATAATCGCTGGCAAGAGGGCCCTGGAGGACC  
 CTGCACATTTTGGGTTTGGTGTGACAACACTGGTGGAGTGGCCTTCTCACAAAGATGGAGTCATGGA  
 TTTACTGACCCAGTGCAGACTGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC203961 protein sequence  
 Red=Cloning site Green=Tags(s)

MEGLLTRCRALPALATCSRQLSGYVPCRFHHCAPRRGRRLLLSRVFPQNLREDRVLSLQDKSDDLTKS  
 QRLMLQVGLIYPASPGCYHLLPYTVRAMEKLVRIIDQEMQAIIGGQKVNMPSPSPAELWQATNRWDLMGKE  
 LLRLRDRHGKEYCLGPTHEEAITALIASQKLSYKQLPFLLYQVTRKFRDEPRPRFGLLRGREFYMKDMY  
 TFDSSPEAAQTYSLVCDAYCSLFNKLGLPFVKVQADVGTIGGTVSHEFQLPVDIGEDRLAICPRCSFSA  
 NMETLDLSQMNCPCQGPLTKTKGIEVGHFTYLGTKYSSIFNAQFTNVCGKPTLAEMGCYGLGVTRILAA  
 AIEVLSTEDCVRWPSLLAPYQAACLIIPKKSKEQAASELIGQLYDHITAEVQLHGEVLLDDRTHLTIGN  
 RLKDANKFGYPFVIIAGKRALEDPAHFVWCQNTGEVAFLLTKDGVMDLLTPVQTV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6422\\_a05.zip](https://cdn.origene.com/chromatograms/mk6422_a05.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_152268

ORF Size: 1425 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).

- 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_152268.4](#)

RefSeq Size: 2403 bp

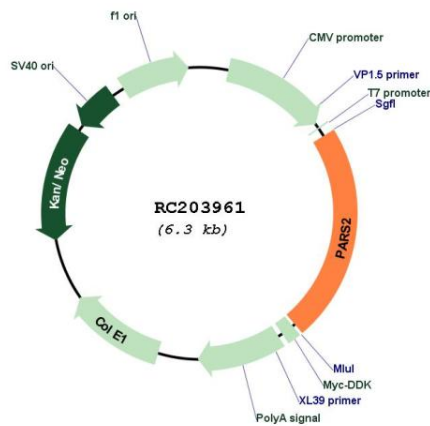
RefSeq ORF: 1428 bp

Locus ID: 25973

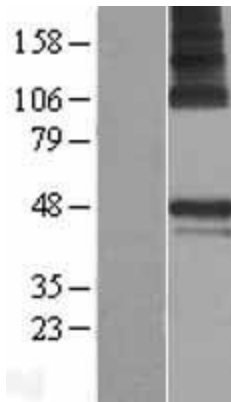
UniProt ID: [Q7L3T8](#)  
 Cytogenetics: 1p32.3  
 Protein Pathways: Aminoacyl-tRNA biosynthesis  
 MW: 53.3 kDa

**Gene Summary:** This gene encodes a putative member of the class II family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of proline to tRNA molecules. Mutations have been found in this gene in some patients with Alpers syndrome. [provided by RefSeq, Mar 2015]

**Product images:**



Circular map for RC203961



Western blot validation of overexpression lysate (Cat# [LY407690]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203961 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).