

Specifications:

Gene:	SARS-CoV-2 NSP7
Accession:	YP_009725303.1
Insert size:	268bp
Concentration:	10µg at 0.2µg/µL

**SARS-CoV-2 NSP7
cDNA Plasmid**

ORF1ab ORF1a
polyprotein;ORF1ab polyprotein
[*Severe acute respiratory
syndrome coronavirus 2*]

Summary:

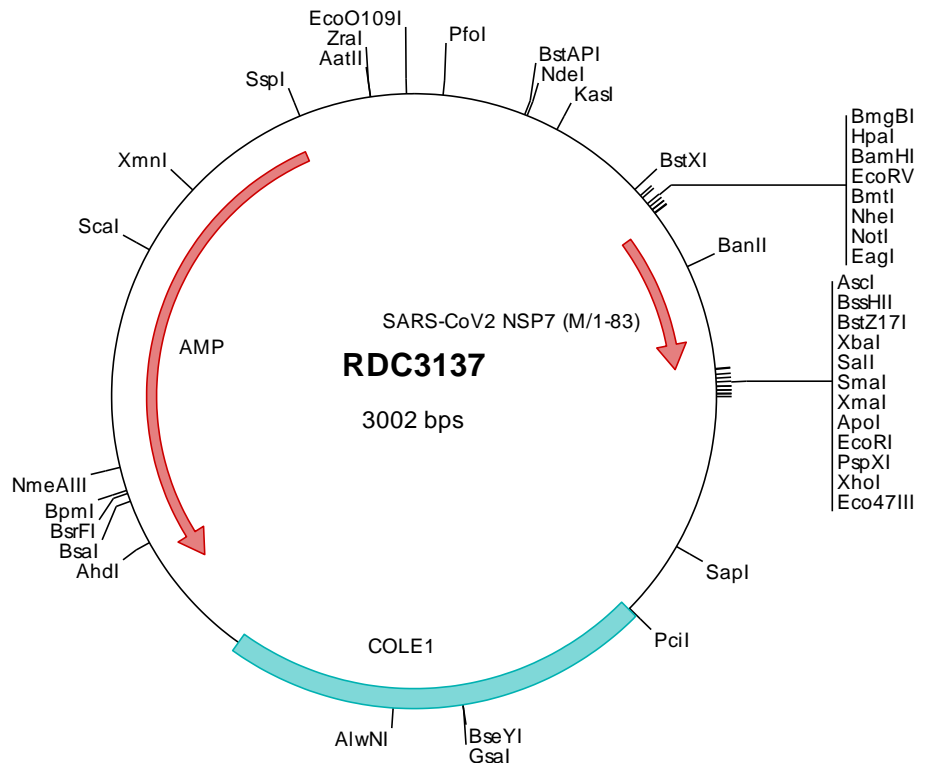
NSP7 is a nonstructural protein found in the Coronavirus polyprotein. SARS-CoV-2 nonstructural proteins are responsible for viral transcription, replication, proteolytic processing, suppression of host immune responses and suppression of host gene expression. The SARS-CoV-2 Nsp7-Nsp8 hexadecamer complex surrounding dsRNA is part of a unique multimeric RNA-dependent RNA replicase capable of both de novo initiation and primer extension. The Nsp7-Nsp8 complex increases the binding of Nsp12 to RNA and enhances the RdRps enzyme activity of Nsp12.

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping Ships at ambient temperature
Stability 1 year from date of receipt when stored at -20°C to -80°C
Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



> RDC3137 Plasmid DNA Sequence

```

1   tcgcgcgcttt  cggatgatgac  ggtgaaaaacc  totgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccggggagca  gacaagcccg
101  tcagggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttaaactatg  cggcatcaga  gcagattgta  otgagagtgc  accatatgcg  gtgtgaaata
201  ccgcacagat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgcatt  caggctcgc  aactgttggg  aagggcgatc  ggtcggggcc  tcttcgctat
301  tacgccagct  ggcgaaaagg  ggatgtgctg  caaggcgatt  aagttgggta  acgccagggt  tttcccagtc  acgacgttgt  aaaacgacgg  ccagtgatt
401  ggagacgtgt  taacaagcct  ggatccgata  tcgctagcgc  ggccgccaacc  atgtctaaaa  tgtcagatgt  aaagtgcaca  tcagtagtct  tactctcagt
501  ttgcaacaa  ctcagagtag  aatcatcatt  taaattgtgg  gctcaatgtg  tccagttaca  caatgacatt  ctcttagcta  aagatactac  tgaagccttt
601  aaaaaatgg  tttcactact  tctgtttttg  ctttccatgc  aggggtgctg  agacataaac  aagcttttgg  aagaaatgct  ggacaacagg  gcaaccttac
701  aataaaggcg  cgccagtata  ctctagatgc  gacacccggg  gaattcctcg  agegctcgtc  tctagcttgg  cgtaatcatg  gtcatagctg  tttcctgtgt
801  gaattgttta  tccgctcaca  attccacaca  acatacagc  cggaaagcata  aagtgtaaag  cctgggggtg  ctaatgagtg  agtaactca  cattaattgc
901  gttgcgctca  ctgcccgtt  tccagtcggg  aaacctgtcg  ttgccagctg  attaatgaat  cggccaacgc  cgggggagag  gcggtttgcg  tattggggcg
1001  tcttccgctt  cctcgctcac  tgactcgctg  cgctcggtcg  ttccggctcg  gcgagcggta  tcagctcact  caaaggcggg  aatacggtta  tccacagaat
1101  caggggataa  cgcaggaaag  aacatgtgag  caaaaggcca  gcaaaaggcc  aggaaccgta  aaaaggcgcg  gttgctggcg  tttttccata  gctccgccc
1201  cctgacgag  catcacaana  atcgacgctc  aagtcagagg  tggcgaaacc  cgacaggact  ataaagatac  caggcgtttc  ccctggaag  ctccctcgtg
1301  cgctctcctg  ttccgaccct  gccgcttacc  ggatacctgt  ccgcctttct  cccttcggga  agcgtggcgc  tttctcaatg  ctacgctgt  aggtatctca
1401  gttcgggtga  ggtcgttcgc  tccaagctgg  gctgtgtgca  cgaaccccc  gttcagcccg  accgctggcg  cttatccggg  aactatcgtc  ttgagtccaa
1501  cccgtaaga  cacgacttat  cgccactggc  agcagccact  ggtaacagga  ttacgagagc  gaggtatgta  ggcggtgcta  cagagtctct  gaagtggtag
1601  ctaactacg  gctacactag  aaggacagta  tttggtatct  gcgctctgct  gaagccaagt  accttcggaa  aaagagttgg  tagctcttga  tccggcaaac
1701  aaaccaccgc  tggtagcggg  ggtttttttg  tttgcaagca  gcagattacg  cgcagaaaaa  aaggatctca  agaagatcct  ttgatctttt  ctacggggtc
1801  tgacgctcag  tggaaacgaa  actcacgtta  agggattttg  gtcatgagat  tatcaaaaag  gatcttcacc  tagatccttt  taaattaaaa  atgaagtttt
1901  aaatcaatct  aaagtatata  tgagtaaaact  tggctgaca  gttaccaatg  cttaatcagt  gaggcacctc  tctcagcgat  ctgtctatct  cgttcattca
2001  tagttgcctg  actcccgtc  gtgtagataa  ctacgatacg  ggagggctta  ccatctggcc  ccagtgtctg  aatgataccg  cgagaccacc  gctcaccggc
2101  tccagattta  tcagcaataa  accagccagc  cggaaaggcc  gagcgcagaa  gtggtcctgc  aactttatcc  gcctccatcc  agtctattaa  ttgttgccgg
2201  gaagctagag  taagttagttc  gccagttaat  agtttgcgca  acgttgttgc  cattgctaca  ggcacgtctg  tgtcacgctc  gtcgtttggt  atggcttcat
2301  tcagctccgg  ttcccaacga  tcaaggcgag  ttacatgata  ccccatgttg  tgcaaaaaag  cggttagctc  cttcggctct  ccgatcgttg  tcagaagtaa
2401  gttggccgca  gtgttatcac  tcatggttat  ggcagcactg  cataattctc  ttactgtcat  gccatccgta  agatgctttt  cgtgactgg  tgagtactca
2501  accaagtcac  tctgagaata  gtgtatgctg  cgaccgagtt  gctcttgccc  ggcgtcaata  cgggataata  ccgcccaca  tagcagaact  ttaaaagtgc
2601  tcatcattgg  aaaacgttct  tcggggcgaa  aactotcaag  gatcttaccg  ctgttgagat  ccagttcgat  gtaaccact  cgtgcaccca  actgatcttc
2701  agcatctttt  actttcacc  gcgtttctgg  gtgagcaaaa  acaggaaggc  aaaaatgccg  aaaaaaggga  ataaggcgca  ccggaaatg  ttgaactctc
2801  atactcttcc  tttttcaata  ttattgaagc  atttatcagg  gttattgtct  catgagcggg  tacataattg  aatgtattta  gaaaaataaa  caaatagggg
2901  ttccgcgcac  atttcccaga  aaagtgccac  ctgacgtcta  agaaaccatt  attatcatga  cattaacctc  taaaaatagg  cgtatcacga  gcccttttcg
3001  tc

```

> RDC3137 Translated Insert Sequence

```

1   mskmsdvkct  svllslvlqg  lrvevssklw  aqcvqlhndi  llakdtteaf  ekmvslslvl  lsmqgavdin  klceemldnr  atlq

```