

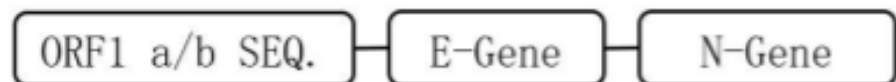
# FNV-SARS-CoV-2-abEN (partial sequence of ORF1a/b, N and E gene)

Cat# PV004

Store at -20°C for 6 months

## INFORMATION

<b>DESCRIPTION:</b>	The partial ORF1a/b SEQ., E gene and N gene coding sequence were cloned into retroviral vector by chemical synthesis to obtain FNV-SARS-CoV-2-abEN pseudovirus. The pseudovirus are prepared with using 293T. For the concentration and purification of the ultracentrifuge. For the FNV-SARS-CoV-2-abEN pseudovirus we used ultracentrifugation. Viral envelope of the FNV-SARS-CoV-2-abEN pseudovirus include ORF1a/b SEQ., E gene and N gene coding sequence, using in experiments which are related to RNA extraction and become the positive control of qPCR.
<b>PRODUCT NAME:</b>	FNV-SARS-CoV-2-abEN pseudovirus
<b>APPLICATIONS:</b>	Research Recommended amount: 50-100 µl/time. According to experimental conditions, it can be adjusted.
<b>TAG:</b>	ORF1a/b SEQ, E Gene & N Gene
<b>Main ingredient</b>	glucose 、 KH <sub>2</sub> PO <sub>4</sub> 、 Na <sub>2</sub> HPO <sub>4</sub> 、 NaCl 、 KCl 、 FNV-SARS-CoV-2-abEN pseudovirus
<b>FORMULATION:</b>	Liquid
<b>PRODUCT:</b>	>1 x 10 <sup>7</sup> copy/ml in 1 ml
<b>STORAGE &amp; STABILITY:</b>	The product can be stored at -20°C or below for 6 months. Avoid repeated freezing and thawing cycles.



## STORAGE

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## PROTOCOL

1. Pseudovirus Melting: The pseudovirus are taken from -20°C and melted with 4°C ice bath. You can execute the related experiments when the pseudovirus completely melted.

2. Pseudovirus Inactivate (optional operation): Extract the sufficient pseudovirus in eppendorf at 56°C for 30 min that need to operation in Biological safety cabinet (BSC).
3. Pseudovirus extraction and qPCR detection (materials prepare by yourself): Perform relevant experimental operations in accordance with the instructions of the RNA extraction kit and qPCR detection kit.
4. qPCR Detection (materials prepare by yourself): The qPCR detection was performed after pseudovirus RNA was synthesized cDNA by RT-PCR.
5. Supplementary: The produce maybe a small amount of plasmid DNA remain. If the experiments need high purification, it can use DNase-DEPC water by RNA extraction. You can add EDTA (final con. 5 mM) for 10 min at 75°C to inactivate DNase (optional operation).

## **NOTE**

1. Freezing and thawing will reduce the stability of the pseudovirus, which will affect the effect of RNA extraction and results of qPCR detection. Avoid repeated freezing and thawing when using.
2. If you need to dilute the pseudovirus, you can choose the 1X PBS or physiological saline (0.9% NaCl).
3. Please rinse immediately with plenty of water when the pseudovirus accidentally splashed on eyes, skin or other body parts.
4. According to the medical waste disposal specifications, the experimental waste generated by using the pseudovirus needs to perform high pressure thermal sterilization process.

## **SEQUENCE INFORMATION**

### 1. ORF1 a/b sequence

```
ATCGTGTTGTCTGTACTGCCGTTGCCACATAGATCATCCAAATCCTAAAGGATTTTGTGACTTAAAAGGTAAGTA
TGACAAATACCTACAACCTGTGCTAATGACCCTGTGGTTTTACTTAAAACACAGTCTGTACCGTCTGCG
GTATGTGGAAAGGTTATGGCTGTAGTTGTGATCAACTCCGCGAACCCATGCTTCAGTCAGCTGATGCACAATC
GTTTTAAACGGGTTTGCGGTGTAAGTGCAGCCGTCTTACACCGTGCGGCACAGGCACTAGTACTGATGTCG
TATACAGGGCTTTTGACATCTACAATGATAAAGTAGCTGGTTTTGCTAAATTCCTAAAACTAATTGTTGTCGCT
TCCAAGAAAAGGACGAAGATGACAATTTAATTGATTCTTACTTTGTAGTTAAGAGACACACTTTCTCTAACTAC
CAACATGAAGAAACAATTTATAATTTACTTAAGGATTGTCCAGCTGTTGCTAAACAT
```

### 2. E Gene

```
ATGTAATCATTGTTTCGGAAGAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTCTTGCTTTTCGTGGTA
TTCTTGCTAGTTACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGTACTGCTGCAATATTGTTAACGTGAGT
CTTGTAACCTTCTTTTTACGTTTACTCTCGTGTTAAAATCTGAATTCTTCTAGAGTTCTGATCTTCTGGTCT
AA
```

### 3. N Gene

```
ATGTCTGATAATGGACCCCAAATCAGCGAAATGCACCCCGCATTACGTTTGGTGGACCCTCAGATTCAACTG
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GCAGTAACCAGAATGGAGAACGCAGTGGGGCGCGATCAAAACAACGTCGGCCCAAGGTTTACCCAATAATA  
CTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCTCGAGGACAAGGCGTTCC  
AATTAACACCAATAGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAATTCGTGGTGGT  
GACGGTAAAATGAAAGATCTCAGTCCAAGATGGTATTTCTACTACCTAGGAACTGGGCCAGAAGCTGGACTTC  
CCTATGGTGCTAACAAAGACGGCATCATATGGGTTGCAACTGAGGGAGCCTTGAATACACCAAAGATCACAT  
TGGCACCCGCAATCCTGCTAACAAATGCTGCAATCGTGCTACAACCTCCTCAAGGAACAACATTGCCAAAAGGC  
TTCTACGCAGAAGGGAGCAGAGGGCGGCAGTCAAGCCTCTTCTCGTTCCCTCATCACGTAGTCGCAACAGTTCA  
AGAAATTCAACTCCAGGCAGCAGTAGGGGAACTTCTCCTGCTAGAATGGCTGGCAATG  
GCGGTGATGCTGCTCTTGCTTTGCTGCTGCTTGACAGATTGAACCAGCTTGAGAGCAAATGTCTGGTAAAG  
GCCAACAAACAAGGCCAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAAGCCTCGGCCAAAAC  
GTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAACAAACCCAAGGAAATTT  
TGGGGACCAGGAACTAATCAGACAAGGAACTGATTACAAACATTGGCCGCAAATTGCACAATTTGCCCCAG  
CGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTCGGGAACGTGGTTGACCTACACA  
GGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAGTCATTTTGCTGAATAAGCATATTGACGC  
ATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAGAAGAAGGCTGATGAACTCAAGCCTTACC  
GCAGAGACAGAAGAAACAGCAAATGTGACTCTTCTTCTGCTGCAGATTTGGATGATTTCTCAAACAATTG  
CAACAATCCATGAGCAGTGCTGACTCAACTCAGGCCTAA

### **PRODUCT USE LIMITATION**

These products are intended for research use only.