

Pseudovirus-SARS-CoV-2-abSMEN

Cat# PV020

Store at -20°C for 6 months

INFORMATION

DESCRIPTION:	The partial ORF1a/b and S gene, M Gene, E gene and N gene coding sequence were cloned into retroviral vector by chemical synthesis to obtain FNV-SARS-CoV-2-abSMEN pseudovirus. The pseudovirus are prepared with using 293T. For the concentration and purification of the ultracentrifuge. For the FNV-SARS-CoV-2-abSMEN pseudovirus we used ultracentrifugation. Viral envelope of the FNV-SARS-CoV-2-abEN pseudovirus include the partial ORF1a/b and S gene, M Gene, E gene and N gene coding sequence, using in experiments which are related to RNA extraction and become the positive control of qPCR.
PRODUCT NAME:	FNV-SARS-CoV-2-abSMEN pseudovirus
APPLICATIONS:	Research Recommended amount: 50-100 µl/time. According to experimental conditions, it can be adjusted.
TAG:	ORF1a/b SEQ, E Gene & N Gene
Main ingredient	glucose 、 KH ₂ PO ₄ 、 Na ₂ HPO ₄ 、 NaCl 、 KCl 、 FNV-SARS-CoV-2-abSMEN pseudovirus
FORMULATION:	Liquid
PRODUCT:	>1 x 10 ⁷ copy/ml in 1 ml
STORAGE & STABILITY:	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 eppendroft 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 (optional operation): 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. Virus inactivation treatment may lead to RNA explanation, please choose according to the needs of the experiment.
3. If you need to dilute the pseudovirus, you can choose the 1X PBS or physiological saline (0.9% NaCl).
4. Please rinse immediately with plenty of water when the pseudovirus accidentally splashed on eyes, skin or other body parts.
5. 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

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ATCGTGTTGTCTGTACTGCCGTTGCCACATAGATCATCCA  
AATCCTAAAGGATTTTGTGACTTAAAAGGTAAGTATGTAC  
AAATACCTACAACCTTGTGCTAATGACCCTGTGGGTTTTAC  
ACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAA  
GGTTATGGCTGTAGTTGTGATCAACTCCGCGAACCCATGC  
TTCAGTCAGCTGATGCACAATCGTTTTTAAACGGGTTTGC  
GGTGTAAGTGCAGCCCGTCTTACACCGTGCGGCACAGGCA  
CTAGTACTGATGTCGTATACAGGGCTTTTGACATCTACAA  
TGATAAAGTAGCTGGTTTTGCTAAATTCCTAAAACTAAT  
TGTTGTCGCTTCCAAGAAAAGGACGAAGATGACAATTTAA  
TTGATTCTTACTTTGTAGTTAAGAGACACACTTTCTCTAA  
CTACCAACATGAAGAAACAATTTATAATTTACTTAAGGAT  
TGTCAGCTGTTGCTAAACAT
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2. E Gene

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ATGTAATCATTCGTTTCGGAAGAGACAGGTACGTTAATAG
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TTAATAGCGTACTTCTTTTTCTTGCTTCGTGGTATTCTT
GCTAGTTACTAGCCATCCTTACTGCGCTTCGATTGTGT
GCGTACTGCTGCAATATTGTTAACGTGAGTCTTGAAAAC
CTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTC
TTCTAGAGTTCCTGATCTTCTGGTCTAA

3.N Gene

ATGTCTGATAATGGACCCCAAATCAGCGAAATGCACCCC
GCATTACGTTTGGTGGACCCTCAGATTCAACTGGCAGTAA
CCAGAATGGAGAACGCAGTGGGGCGCGATCAAAACAACGT
CGGCCCAAGGTTTACCCAATAATACTGCGTCTTGTTCA
CCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCC
TCGAGGACAAGGCGTTCCAATTAACACCAATAGCAGTCCA
GATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA
TTCGTGGTGGTGACGGTAAAATGAAAGATCTCAGTCCAAG
ATGGTATTTCTACTACCTAGGAACTGGGCCAGAAGCTGGA
CTTCCCTATGGTGCTAACAAAGACGGCATCATATGGGTTG
CAACTGAGGGAGCCTTGAATACACCAAAGATCACATTGG
CACCCGCAATCCTGCTAACAAATGCTGCAATCGTGCTACAA
CTTCCTCAAGGAACAACATTGCCAAAAGGCTTCTACGCAG
AAGGGAGCAGAGGCGGCAGTCAAGCCTTCTCGTTCCTC
ATCACGTAGTCGCAACAGTTCAAGAAATCAACTCCAGGC
AGCAGTAGGGGAACTTCTCCTGCTAGAATGGCTGGCAATG
GCGGTGATGCTGCTTTGCTTTGCTGCTGCTTGACAGATT
GAACCAGCTTGAGAGCAAAATGTCTGGTAAAGGCCAACAA
CAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGG
CTTCTAAGAAGCCTCGGCAAAACGTAAGTCCACTAAAGC
ATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA
CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGAC
AAGGAACTGATTACAAACATTGGCCGCAAATTGCACAATT
TGCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATT
GGCATGGAAGTCACACCTTCGGGAACGTGGTTGACCTACA
CAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAA
AGATCAAGTCATTTTCTGTAATAAGCATATTGACGCATAC
AAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAGA
AGAAGGCTGATGAACTCAAGCCTTACCGCAGAGACAGAA
GAAACAGCAAACCTGTGACTCTTCTCCTGCTGCAGATTTG
GATGATTTCTCAAACAATTGCAACAATCCATGAGCAGTG
CTGACTCAACTCAGGCCTAA

4.M Gene

GGCAGATTCCAACGGTACTATTACCGTTGAAGAGCTTAAA
AAGCTCCTTGAACAATGGAACCTAGTAATAGGTTTCCTAT
TCCTTACATGGATTTGTCTTCTACAATTTGCCTATGCCAA
CAGGAATAGGTTTTTGTATATAATTAAGTTAATTTTCCTC
TGGCTGTTATGGCCAGTAACTTTAGCTTGTTTTGTGCTTG
CTGCTGTTTACAGAATAAATTGGATCACCGGTGGAATTGC
TATCGCAATGGCTTGTCTTGTAGGCTTGATGTGGCTCAGC
TACTTCATTGCTTCTTTCAGACTGTTTGCGCGTACGCGTT
CCATGTGGTCATTCAATCCAGAACTAACATTCTTCTCAA
CGTGCCACTCCATGGCACTATTCTGACCAGACCGCTTCTA
GAAAGTGAACCTCGTAATCGGAGCTGTGATCCTTCGTGGAC
ATCTTCGTATTGCTGGACACCATCTAGGACGCTGTGACAT
CAAGGACCTGCCTAAAGAAATCACTGTTGCTACATCACGA
ACGCTTTCTTATTACAAATTGGGAGCTTCGCAGCGTGTAG
CAGGTGACTCAGGTTTTGCTGCATACAGTCGCTACAGGAT
TGGCAACTATAAATTAACACAGACCATTCCAGTAGCAGT
GACAATATTGCTTTGCTTGTACAGTAA

5.S Gene

GTTCTTGTTAACAACCTAAACGAACAATGTTTGTTTTCTT
GTTTTATTGCCACTAGTCTCTAGTCAGTGTGTTAATCTTA
CAACCAGAACTCAATTACCCCTGCATACACTAATTCTTT
CACACGTGGTGTATTACCCTGACAAAGTTTTTCAGATCC
TCAGTTTTACATTCAACTCAGGACTTGTTCTTACCTTTCT
TTTCCAATGTTACTTGGTTCATGCTATACATGTCTCTGG
GACCAATGGTACTAAGAGGTTTGATAACCCTGTCCTACCA
TTAATGATGGTGTATTGCTTCCACTGAGAAGTCTA
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GAAGACCCAGTCCCTACTTATTGTTAATAACGCTACTAAT
GTTGTTATTAAGTCTGTGAATTTCAATTTGTAATGATC
CATTTTTGGGTGTTTATTACCACAAAACAACAAAAGTTG
GATGGAAAGTGAGTTCAGAGTTTATTCTAGTGCGAATAAT
TGCACTTTTGAATATGTCTCTCAGCCTTTTCTTATGGACC
TTGAAGGAAAACAGGGTAATTTCAAAAATCTTAGGGAATT
TGTGTTAAGAATATTGATGGTTATTTAAAATATATTCT
AAGCACACGCCTATTAATTTAGTGCGTGATCTCCCTCAGG
GTTTTTCGGCTTTAGAACCATTGGTAGATTTGCCAATAGG

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AGAAGTTATTTGACTCCTGGTGATTCTTCTTCAGGTTGGA
CAGCTGGTGCTGCAGCTTATTATGTGGGTTATCTTCAACC
TAGGACTTTTTCTATTAATAAATAATGAAAATGGAACCATT
ACAGATGCTGTAGACTGTGCACTTGACCCTCTCTCAGAAA
CAAAGTGACGTTGAAATCCTTCACTGTAGAAAAAGGAAT
CTATCAAACCTTAACTTTAGAGTCCAACCAACAGAATCT
ATTGTTAGATTTCTAATATTACAACTTGTGCCCTTTTG
GTGAAGTTTTTAACGCCACCAGATTTGCATCTGTTTATGC
TTGGAACAGGAAGAGAATCAGCAACTGTGTTGCTGATTAT
TCTGTCCTATATAATTCCGCATCATTTTCCACTTTTAAGT
GTTATGGAGTGTCTCCTACTAAATTAATGATCTCTGCTT
TACTAATGTCTATGCAGATTCATTTGTAATTAGAGGTGAT
GAAGTCAGACAAATCGCTCCAGGGCAAACCTGGAAAGATTG
CTGATTATAATTATAAATTACCAGATGATTTTACAGGCTG
CGTTATAGCTTGGAATTCTAACAATCTTGATTCTAAGGTT
GGTGGTAATTATAA

PRODUCT USE LIMITATION

These products are intended for research use only.