FNV-SARS-CoV-2-abMEN

Cat# PV019

Store at -20°C for 6 months

INFORMATION

DESCRIPTION:	The partial ORF1a/b, M Gene, E gene and N gene coding sequence were cloned into retroviral vector by chemical synthesis to obtain FNV-SARS-CoV-2-abMEN pseudovirus. The pseudovirus are prepared with using 293T. For the concentration and purification of the ultracentrifuge. For the FNV-SARS-CoV-2-abMEN pseudovirus we used ultracentrifugation. Viral envelope of the FNV-SARS-CoV-2-abMEN pseudovirus include ORF1a/b, 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-abMEN 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_2PO_4、Na_2HPO_4、NaCl、KCl、FNV-SARS-CoV-2-abMEN 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.

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PROTOCOL

1. Pseudovirus Melting: The pseudovirus are taked 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 (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. 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. Plaese 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.

SEQENCE INFORMATION

1. ORF1 a/b sequence

ATCGTGTTGTCTGTACTGCCGTTGCCACATAGATCATCCA
AATCCTAAAGGATTTTGTGACTTAAAAGGTAAGTATGTAC
AAATACCTACAACTTGTGCTAATGACCCTGTGGGTTTTAC
ACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAA
GGTTATGGCTGTAGTTGTGATCAACTCCGCGAACCCATGC
TTCAGTCAGCTGATGCACAATCGTTTTTAAACGGGTTTGC
GGTGTAAGTGCAGCCCGTCTTACACCGTGCGGCACAGGCA
CTAGTACTGATGTCGTATACAGGGCTTTTGACATCTACAA
TGATAAAGTAGCTGGTTTTGCTAAATTCCTAAAAACTAAT
TGTTGTCGCTTCCAAGAAAAGGACGAAGATGACAATTTAA
TTGATTCTTACTTTGTAGTTAAGAGACACACTTTCTCTAA
CTACCAACATGAAGAAACAATTTATAATTTACTTAAGGAT
TGTCCAGCTGTTGCTAAACAT

2. E Gene

ATGTACTCATTCGTTTCGGAAGAGACAGGTACGTTAATAG

TTAATAGCGTACTTCTTTTTCTTGCTTTCGTGGTATTCTT
GCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGT
GCGTACTGCTGCAATATTGTTAACGTGAGTCTTGTAAAAC
CTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTC
TTCTAGAGTTCCTGATCTTCTGGTCTAA

3.N Gene

ATGTCTGATAATGGACCCCAAAATCAGCGAAATGCACCCC
GCATTACGTTTGGTGGACCCTCAGATTCAACTGGCAGTAA
CCAGAATGGAGAACGCAGTGGGGCGCGATCAAAACAACGT
CGGCCCCAAGGTTTACCCAATAATACTGCGTCTTGGTTCA
CCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCC
TCGAGGACAAGGCGTTCCAATTAACACCAATAGCAGTCCA
GATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA
TTCGTGGTGGTGACGGTAAAATGAAAGATCTCAGTCCAAG
ATGGTATTTCTACTACCTAGGAACTGGGCCAGAAGCTGGA
CTTCCCTATGGTGCTAACAAAGACGGCATCATATGGGTTG
CAACTGAGGGAGCCTTGAATACACCAAAAGATCACATTGG
CACCCGCAATCCTGCTAACAATGCTGCAATCGTGCTACAA
CTTCCTCAAGGAACAACATTGCCAAAAGGCTTCTACGCAG
AAGGGAGCAGAGGCGGCAGTCAAGCCTCTTCTCGTTCCTC
ATCACGTAGTCGCAACAGTTCAAGAAATTCAACTCCAGGC
AGCAGTAGGGGAACTTCTCCTGCTAGAATGGCTGGCAATG
GCGGTGATGCTGCTCTTGCTTTGCTGCTGCTTGACAGATT
GAACCAGCTTGAGAGCAAAATGTCTGGTAAAGGCCAACAA
CAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGG
CTTCTAAGAAGCCTCGGCAAAAACGTACTGCCACTAAAGC
ATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA
CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGAC
AAGGAACTGATTACAAACATTGGCCGCAAATTGCACAATT
TGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATT
GGCATGGAAGTCACACCTTCGGGAACGTGGTTGACCTACA
CAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAA
AGATCAAGTCATTTTGCTGAATAAGCATATTGACGCATAC
AAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA
AGAAGGCTGATGAAACTCAAGCCTTACCGCAGAGACAGAA
GAAACAGCAAACTGTGACTCTTCTTCCTGCTGCAGATTTG
GATGATTTCTCCAAACAATTGCAACAATCCATGAGCAGTG
CTGACTCAACTCAGGCCTAA

4.M Gene

GGCAGATTCCAACGGTACTATTACCGTTGAAGAGCTTAAA
AAGCTCCTTGAACAATGGAACCTAGTAATAGGTTTCCTAT
TCCTTACATGGATTTGTCTTCTACAATTTGCCTATGCCAA
CAGGAATAGGTTTTTGTATATAATTAAGTTAATTTTCCTC
TGGCTGTTATGGCCAGTAACTTTAGCTTGTTTTGTGCTTG
CTGCTGTTTACAGAATAAATTGGATCACCGGTGGAATTGC
TATCGCAATGGCTTGTCTTGTAGGCTTGATGTGGCTCAGC
TACTTCATTGCTTCTTTCAGACTGTTTGCGCGTACGCGTT
CCATGTGGTCATTCAATCCAGAAACTAACATTCTTCTCAA
CGTGCCACTCCATGGCACTATTCTGACCAGACCGCTTCTA
GAAAGTGAACTCGTAATCGGAGCTGTGATCCTTCGTGGAC
ATCTTCGTATTGCTGGACACCATCTAGGACGCTGTGACAT
CAAGGACCTGCCTAAAGAAATCACTGTTGCTACATCACGA
ACGCTTTCTTATTACAAATTGGGAGCTTCGCAGCGTGTAG
CAGGTGACTCAGGTTTTGCTGCATACAGTCGCTACAGGAT
TGGCAACTATAAATTAAACACAGACCATTCCAGTAGCAGT
GACAATATTGCTTTGCTTGTACAGTAA

PRODUCT USE LIMITATION

These products are intended for research use only.