

SARS-CoV-2 Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-NIV, Pune
2.	Type of Virus (Genus and Species name)	SARS-CoV-2
3.	Virus / Bacteria/Protozoa Strain details	SARS-CoV-2, NIV-2020-770, B.1 variant
	Location (area of origin)- District/ State/ Country	India
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Tissue Culture Fluid (TCF)
	Year of Isolation & Specimen Source	2020, Throat/ nasal swab
	Culture Media used for Isolation	Eagle's MEM (Minimum Essential Medium)
	Name of Depositors (Internal/ External)	Dr Pragya Yadav
	NCBI Accession Number / Institute ID	EPI_ISL_420546
	Year of Accession Number	2020
	Virus titer	10 ^{6.5} TCID50/mL
	Parasite count (per µL)	Not applicable
4.	Passage details of given Virus/ Bacteria	
	Cell line used	Vero-CCL-81 cells
	Growth/ Culturing conditions including medium used	Eagle's MEM supplemented with 2 % FBS (Fetal Bovine Serum)
	FBS used in the Medium	2% FBS
	Cell Monolayer Confluency for infection	80-90%
	Time taken from infection to harvest in cell line	4 days
	Incubation conditions and duration	37°C, 5% CO ₂
	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	Not applicable
5.	Genomic sequence Partial/ Full GenBank ID	Full genome: EPI_ISL_420546
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Real time RT-PCR for E gene: Forward: ACAGGTACGTTAATAGTTAATAGCGT Reverse: ATATTGCAGCAGTACGCACACA FAM- ACACTAGCCATCCTTACTGCGCTTCG-BHQ
9.	Sequencing technique used	-
10.	PCR Conditions as applicable	Reverse Transcription: 55°C for 10 min, Taq inhibitor inactivation: 95°C for 3 min PCR amplification (45 Cycles): 95°C for 15 sec, 58°C for 30 sec (data collection), Final extension: 40°C for 30 sec
11.	PCR amplicon size	Not applicable
12.	Gene/ Genotype	E gene
13.	Drug resistance status	Not applicable

Note: This certificate represents a single strain from the collection of SARS-CoV-2 samples maintained by NIV

Nipah Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-NIV
2.	Type of Virus (Genus and Species name)	Paramyxoviridae, Nipah virus
3.	Virus / Bacteria/Protozoa Strain details	Nipah Virus NIV-1854542; MCL-18- H-1088
	Location (area of origin)- District/ State/ Country	Kozhikode, Kerala
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Tissue Culture Fluid (TCF)
	Year of Isolation & Specimen Source	2018; Human (oropharyngeal swabs)
	Culture Media used for Isolation	EMEM
	Name of Depositors (Internal/ External)	Dr Pragya Yadav
	NCBI Accession Number / Institute ID	MH523642 /MCL-18-H-1088
	Year of Accession Number	2018
	Virus titer	10 ^{6.5} TCID ₅₀ /mL
	Parasite count (per µL)	Not applicable
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	Vero CCL-81 cell line, MEM (Minimum Essential Medium) with 2 % FBS (Fetal Bovine Serum)
	Growth/ Culturing conditions including medium used	MEM (Minimum Essential Medium) with 2 % FBS (Fetal Bovine Serum)
	FCS/ FBS used in the medium	2 % FBS
	Cell Monolayer Confluency for infection	80-90%
	Time taken from infection to harvest in cell line	5 Days
	Incubation conditions and duration	37°C/ 5% CO ₂
5.	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	Not applicable
	Genomic sequence Partial/ Full GenBank ID	Whole Genome (MH523642)
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Nipah 1209 GCA AGA GAG TAA TGT TCA GGC TAG AG Nipah 1314 CTG TTC TAT AGG TTC TTC CCC TTC AT Nipah Probe 1248 TGC AGG AGG TGT GCT CAT TGG TGG
9.	Sequencing technique used	-
10.	PCR Conditions as applicable	Reverse Transcription: 50°C for 30 min Taq inhibitor inactivation: 95°C for 2 min PCR amplification: (40 cycles) 95°C for 15 sec and 60°C for 1 min
11.	PCR amplicon size	Not applicable
12.	Gene/ Genotype	NP (I Genotype)
13.	Drug resistance status	No specific drugs available

CCHFV Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-NIV
2.	Type of Virus (Genus and Species name)	Nairoviridae Orthonairovirus
3.	Name of Virus Strain	Crimean Congo Hemorrhagic Fever Virus (CCHFV)
	Location (area of origin)- District/ State/ Country	Ahmedabad, Gujarat
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Human serum sample
	Year of Isolation & Specimen Source	2011
	Culture Media used for Isolation	MEM (Minimum Essential Medium)
	Name of Depositors (Internal/ External)	Dr Pragya Yadav and Dr D.T Mourya
	NCBI Accession Number / Institute ID	JN627865/ NIV 11704
	Year of Accession Number	2013
	Virus titer	10 ^{4.2} TCID ₅₀ /mL
	Parasite count (per µL)	Not applicable
4.	Passage details of given Virus/ Bacteria	
	Cell line used	Vero CCL-81, MEM with 2 % FBS (Fetal Bovine Serum)
	Growth/ Culturing conditions including medium used	MEM with 2 % FBS
	FCS/ FBS used in the medium	2 % FBS
	Cell Monolayer Confluency for infection	80-90%
	Time taken from infection to harvest in cell line	7 Days
	Incubation conditions and duration	37 ° C/ 5 % CO ₂
5.	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	Not applicable
	Genomic sequence Partial/ Full	JN627865
	GenBank ID	
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	CCHF NP gene F: CAAAGAAACACGTGCCGCTT R: ATTCACCTCGATTTTGTTCAT P: ACGCCACAGTGTTCTCTTGAGTGTTAGCA
9.	Sequencing technique used	Whole Genome Sequencing (WGS)
10.	PCR Conditions as applicable	Reverse Transcription 50°C for 5min Taq inhibitor inactivation 95°C for 20 sec PCR amplification (40 Cycles): 95°C for 5 Sec and 55°C for 30 sec
11.	PCR amplicon size	Not applicable
12.	Gene/ Genotype	NP gene
13.	Drug resistance status	Susceptible to Ribavirin

Chandipura Virus Isolates- Characterization Report

Sr.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-National Institute of Virology
2.	Type of Virus (Genus and Species name)	Genus – Vesiculovirus Species- Chandipura
3.	Virus details	
	Location (area of origin)- District/ State/ Country	(Manipura, Savli) Vadodara/Gujarat/India
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Virus isolates from Chandipura infected patient serum
	Year of Isolation & Specimen Source	Year 2024 (Human serum/ SSG Baroda hospital)
	Culture Media used for Isolation	Dulbecco's Modified Eagle Medium
	Name of Depositors (Internal/ External)	Internal
	NCBI Accession Number / Institute ID	NIV ID 2414207
	Year of Accession Number	Not submitted
	Virus titer	1x10 ⁸ PFU/mL
	Parasite count (per µL)	-
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	CD1 infant mice (2-day old)- 1 passage, followed by adaptation to Vero (ATCC-CCL-81) cells till Passage 10, followed by two rounds of plaque purification and bulk stock prepared at P-13 level.: Media used - Dulbecco's Modified
	Growth/ Culturing conditions including medium. used	Dulbecco's Modified Eagle Medium with 10% Fetal Bovine Serum (FBS)
	FCS/ FBS used in the Medium	FBS (10%)
	Cell Monolayer Confluency for infection	80-90% confluency
	Time taken from infection to harvest in cell line	24-30 hours post infection with 0.01 moi of infectivity dose
	Incubation conditions and duration	37°C at 5% CO ₂ and 80-90% Humidity duration- 24 hours
5.	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	24 hours
	Genomic sequence Partial/ Full GenBank ID	495 bases partial G protein (Not submitted to GenBank)
6.	Sterility details	Not Applicable
7.	Quantity of sample	Bulk virus stock: 100mL
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Primer sequence: CHP_3740(F):ACTCTCACATGGAAGGTGCT CHP_4262(R):CAATTCCTCATACCGATCAGAT CHP_3892(nF):GACAGAGGTGAGATCTACTC T Confirmation by conventional semi-nested PCR as well as real-time PCR
9.	Sequencing technique used	Sanger sequencing of diagnostic PCR product and WGS (Whole Genome Sequencing) using Illumina sequencing
10.	PCR Conditions as applicable	One step RT-PCR and Semi- nested PCR cycling conditions

		<p>One step RT-PCR cycling conditions.</p> <table> <tr> <th>Temperature</th><th>Time</th><th>Cycling conditions</th></tr> <tr> <td>50°C</td><td>30 min</td><td>1 cycle, Reverse transcription</td></tr> <tr> <td>95°C</td><td>10 min</td><td>1 cycle; Pre-PCR</td></tr> <tr> <td>95°C</td><td>30 sec</td><td>-</td></tr> <tr> <td>56°C</td><td>30 sec</td><td>35 cycles; PCR amplification</td></tr> <tr> <td>72°C</td><td>30 sec</td><td>-</td></tr> <tr> <td>72°C</td><td>5 min</td><td>Final extension</td></tr> </table> <p>Semi-nested PCR cycling conditions.</p> <table> <tr> <th>Temperature</th><th>Time</th><th>Cycling conditions</th></tr> <tr> <td>94°C</td><td>3 min</td><td>Pre-PCR</td></tr> <tr> <td>94°C</td><td>30 sec</td><td>-</td></tr> <tr> <td>56°C</td><td>30 sec</td><td>35 cycles; PCR amplification</td></tr> <tr> <td>72°C</td><td>30 sec</td><td>-</td></tr> <tr> <td>72°C</td><td>30 sec</td><td>1 cycle; Final extension</td></tr> </table>	Temperature	Time	Cycling conditions	50°C	30 min	1 cycle, Reverse transcription	95°C	10 min	1 cycle; Pre-PCR	95°C	30 sec	-	56°C	30 sec	35 cycles; PCR amplification	72°C	30 sec	-	72°C	5 min	Final extension	Temperature	Time	Cycling conditions	94°C	3 min	Pre-PCR	94°C	30 sec	-	56°C	30 sec	35 cycles; PCR amplification	72°C	30 sec	-	72°C	30 sec	1 cycle; Final extension
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72°C	30 sec	1 cycle; Final extension																																							
11.	PCR amplicon size	First PCR product size- 522bp Semi-Nest PCR product size- 70bp																																							
12.	Gene/ Genotype	Genotype not assigned																																							
13.	Drug resistance status	Not Applicable																																							

Measles Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-National Institute of Virology
2.	Type of Virus (Genus and Species name)	<i>Morbillivirus, Measles morbillivirus</i>
3.	Virus Strain details	
	Location (area of origin)- District/ State/ Country	Kheda (Gujarat), India
	Specimen Type	Throat swab
	Year of Isolation & Specimen Source	2017/ Suspected case-throat swab
	Culture Media used for Isolation	DMEM
	Name of Depositors (Internal/ External)	Dr. Sunil R. Vaidya
	NCBI Accession Number / Institute ID	*MH356244/ NIV ID 1721363
	Year of Accession Number	2017
	Virus titer	10 ⁷ FFU/mL
	Parasite count (per μ L)	
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	Vero hSLAM Cells/ DMEM with 10% FCS (Fetal Calf Serum)
	Growth/ Culturing conditions including medium used	37°C in 5% CO ₂ environment
	FCS used in the Medium	5% FCS for infection
	Cell Monolayer Confluency for infection	80-90 %
	Time taken from infection to harvest in cell line	3-5 days
	Incubation conditions and duration	37°C in 5% CO ₂ environment/ 3-5 days
	Time taken from infection to harvest in embryonated cells	Approx. 3-5 days (depending on cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full GenBank ID	Full Genome MH356244
6.	Sterility details	All experiments conducted in sterile conditions
7.	Quantity	1mL per vial
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	MeV RT-PCR (Nucleoprotein gene)
9.	Sequencing technique used	Sanger Sequencing
10.	PCR Conditions as applicable	55°C for 30 min (cDNA), 94°C for 2 min (Hot start), followed by 40 cycles of 94°C for 15 Sec (Denaturation), 55°C for 30 Sec (Annealing), 72°C for 30 Sec (Extension), Final extension 72°C for 7 min and 4°C (hold).
11.	PCR amplicon size	634bp
12.	Gene/ Genotype	Nucleoprotein gene/ MeV Genotype-D8
13.	Drug resistance status	Not available

Note: This is a representative certificate for one MeV strain only from our collection of MeVs.

Mumps Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-National Institute of Virology
2.	Type of Virus (Genus and Species name)	<i>Mumps, Orthorubulavirus</i>
3.	Virus strain details	
	Location (area of origin)- District/ State/ Country	Pune (Maharashtra), India
	Specimen Type	Oral Swab
	Year of Isolation & Specimen Source	2012/ Suspected case- oral swab
	Culture Media used for Isolation	DMEM
	Name of Depositors (Internal/ External)	Dr. Sunil R. Vaidya
	NCBI Accession Number / Institute ID	KF738114/ NIV ID 121185*
	Year of Accession Number	2012
	Virus titer	10 ⁵ FFU/mL
	Parasite count (per µL)	-
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	Vero Cell line/ DMEM with 10% FCS (Fetal Calf Serum)
	Growth/ Culturing conditions including medium used	37°C in 5% CO ₂ environment
	FCS used in the Medium	5% FCS for infection
	Cell Monolayer Confluency for infection	80-90%
	Time taken from infection to harvest in cell line	3-5 days
	Incubation conditions and duration	37°C in 5% CO ₂ environment/ 3-5 days
	Time taken from infection to harvest in embryonated Cells	Approx. 3-5 days (depending on cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full GenBank ID	Full Genome, KF738114
6.	Sterility details	All experiments conducted in sterile conditions
7.	Quantity	1mL per vial
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	MuV RT-PCR (Small Hydrophobic gene)
9.	Sequencing technique used	Sanger Sequencing
10.	PCR Conditions as applicable	55°C for 30 min (cDNA), 94°C for 2 min (Hot start), followed by 40 cycles of 94°C for 15 Sec (Denaturation), 55°C for 30 Sec (Annealing), 72°C for 30 Sec (Extension), Final extension 72°C for 7 min and 4°C (hold).
11.	PCR amplicon size	656bp
12.	Gene/ Genotype	Small Hydrophobic gene/ Genotype-G
13.	Drug resistance status	Not available

Note: This is a representative certificate for one MuV strain only from our collection of MuVs.

Rubella Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR-National Institute of Virology
2.	Type of Virus (Genus and Species name)	<i>Rubivirus, Rubivirus rubellae</i>
3.	Virus Strain details	
	Location (area of origin)- District/ State/ Country	Pune (Maharashtra), India
	Specimen Type	Throat swab
	Year of Isolation & Specimen Source	1992/ Suspected case-urine
	Culture Media used for Isolation	DMEM
	Name of Depositors (Internal)	Dr. Sunil R. Vaidya
	NCBI Accession Number / Institute ID	*MH745077/ NIVID 924773
	Year of Accession Number	2019
	Virus titer	10 ⁵ FFU/mL
	Parasite count (per μ L)	-
4.	Passage details of given Virus	
	Cell line / Lab Animal/ Name of specific culture media used	Vero hSLAM Cells/ DMEM with 10% FCS (Fetal Calf Serum)
	Growth/ Culturing conditions including medium used	37°C in 5% CO ₂ environment
	FCS used in the Medium	5% FCS for infection
	Cell Monolayer Confluency for infection	80-90%
	Time taken from infection to harvest in cell line	5-7 days
	Incubation conditions and duration	37°C in 5% CO ₂ environment/ 5-7 days
	Time taken from infection to harvest in embryonated Cells	Approx. 5-7 days (depending on cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full GenBank ID	Full Genome MH745077
6.	Sterility details	All experiments conducted in sterile conditions
7.	Quantity	1mL per vial
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	RuV RT-PCR (Envelope-1 gene)
9.	Sequencing technique used	Sanger Sequencing
10.	PCR Conditions as applicable	55°C for 30 min (cDNA), 95°C for 15 min (Hot start), followed by 40 cycles of 95°C for 30 Sec (Denaturation), 60°C for 30 Sec (Annealing), 72°C for 1 min (Extension), Final extension 72°C for 10 min and 4°C (hold).
11.	PCR amplicon size	185 bp
12.	Gene/ Genotype	Envelope gene/ Genotype-2B
13.	Drug resistance status	Not available

Note: This is a representative certificate for one RuV strain only from our collection of RuVs.

Zika Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR – National Institute of Virology, Pune
2.	Type of Virus / Bacteria/Protozoa (Genus and Species name)	ZIKA
3.	Virus / Bacteria/Protozoa Strain details	
	Location (area of origin)- District/ State/ Country	Pune, Maharashtra, India
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	NA
	Year of Isolation & Specimen Source	2024, Aedes mosquito
	Culture Media used for Isolation	Vero ccl81
	Name of Depositors (Internal/ External)	Dr. Kavita S Lole
	NCBI Accession Number / Institute ID	PQ461653
	Year of Accession Number	2025
	Virus titer	3.5 X10 ⁵ IU/mL
	Parasite count (per μ L)	Not Available
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	Vero ccl81, MEM culture media
	Growth/ Culturing conditions including medium used	37°C, 5% CO ₂ , 2% MEM maintenance media
	FCS/ FBS used in the Medium	10% FBS (Fetal Bovine Serum)
	Cell Monolayer Confluency for infection	90%
	Time taken from infection to harvest in cell line	7-10 days
	Incubation conditions and duration	37°C, 5% CO ₂ , 7-10 days
	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	Not Available
5.	Genomic sequence Partial/ Full GenBank ID	Full sequence Not Available
6.	Sterility details	Not Available
7.	Quantity of sample	100 μ L/mL
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Forward: CCGCTGCCCAACACAAG Reverse: CCACTAACGTTCTTTTGCAGACAT Probe: FAM- AGCCTACCTTGACAAGCAGTCAGACACTCAA
9.	Sequencing technique used	Standard sequencing
10.	PCR Conditions as applicable	48°C – 15 min 95°C – 2 min. 95°C – 15 sec. 60°C – 1 min.
11.	PCR amplicon size	Not Applicable
12.	Gene/ Genotype	Not Applicable
13.	Drug resistance status	Not Available

Influenza A Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR National Institute of Virology
2.	Type of Virus / Bacteria/Protozoa (Genus and Species name)	Influenza is an RNA virus of Orthomyxovirus genus.
3.	Virus / Bacteria/Protozoa Strain details	Influenza A (H3N2) NIV/25/04
	Location (area of origin)- District/ State/ Country	Puducherry
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Not Applicable
	Year of Isolation & Specimen Source	2025
	Culture Media used for Isolation	MDCK cells maintained in Minimum Essential Medium (MEM) with 150µL TPCK trypsin/mL and 50 µL Nystatin/mL
	Name of Depositors (Internal/ External)	Influenza Group of NIV
	NCBI Accession Number / Institute ID	NA
	Year of Accession Number	2025
	Virus titer	HAI:1;2560
	Parasite count (per µL)	Not Available
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	MDCK Cell Line
	Growth/ Culturing conditions including medium used	
	FCS/ FBS used in the Medium	FCS (Fetal Calf Serum) final Concentration 10%
	Cell Monolayer Confluency for infection	90%
	Time taken from infection to harvest in cell line	72 hours
	Incubation conditions and duration	37°C with 5% CO ₂ incubation for 72 hours.
	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	Not Available
5.	Genomic sequence Partial/ Full GenBank ID	Full genome - <u>EPI_ISL_20125456</u>
6.	Sterility details	Not Available
7.	Quantity of sample	2 mL
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Real Time PCR
9.	Sequencing technique used	Whole Genome Sequencing (WGS)
10.	PCR Conditions as applicable	Not Applicable
11.	PCR amplicon size	Not Applicable
12.	Gene/ Genotype	Not Applicable
13.	Drug resistance status	Sensitive

Note: This is a representative certificate for one Influenza A (H3N2) strain only from our collection of Influenza samples. Further data can be made available on request.

Influenza A Virus Isolates- Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR National Institute of Virology
2.	Type of Virus / Bacteria/Protozoa (Genus and Species name)	Influenza is an RNA virus of Orthomyxovirus genus.
3.	Virus Strain details	Influenza A (H1N1) pdm09 NIV/25/124
	Location (area of origin)- District/ State/ Country	Bangalore
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Not Applicable
	Year of Isolation & Specimen Source	2025
	Culture Media used for Isolation	MDCK cells maintained in Minimum Essential Medium (MEM) with 150µL TPCK trypsin/mL and 50 µL Nystatin/mL
	Name of Depositors (Internal/ External)	Influenza Group of NIV
	NCBI Accession Number / Institute ID	NA
	Year of Accession Number	2025
	Virus titer	HAI: 2560
	Parasite count (per µL)	NA
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	MDCK Cell Line
	Growth/ Culturing conditions including medium used	
	FCS used in the Medium	FCS (Fetal Calf Serum)- final concentration 10%
	Cell Monolayer Confluency for infection	90%
	Time taken from infection to harvest in cell line	72 hours
	Incubation conditions and duration	37° C with 5% CO ₂ incubation for 72 hours
	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	NA
5.	Genomic sequence Partial/ Full GenBank ID	Full genome <u>EPI_ISL_20075868</u>
6.	Sterility details	-
7.	Quantity of sample	2 mL
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Real Time PCR
9.	Sequencing technique used	Whole Genome Sequencing (WGS)
10.	PCR Conditions as applicable	NA
11.	PCR amplicon size	NA
12.	Gene/ Genotype	NA
13.	Drug resistance status	Sensitive

Note: This is a representative certificate for one Influenza A (H1N1) strain only from our collection of Influenza samples. Further data can be made available on request.

Influenza B Virus Isolates - Characterization Report

Sr. No.	Description of the Item	Details
1.	Name of the Institute possessing the sample	ICMR National Institute of Virology
2.	Type of Virus (Genus and Species name)	Influenza is an RNA virus of Orthomyxovirus genus
3.	Virus strain details	Influenza B (Victoria) NIV/25/104
	Location (area of origin)- District/ State/ Country	Pune
	Specimen Type (in case of clones, please specify vectors in which these clones were developed)	Not Applicable
	Year of Isolation & Specimen Source	2025
	Culture Media used for Isolation	MDCK cells maintained in Minimum Essential Medium (MEM) with 150µL TPCK trypsin/mL and 50 µL Nystatin/mL
	Name of Depositors (Internal/ External)	Influenza Group of NIV
	NCBI Accession Number / Institute ID	NA
	Year of Accession Number	2025
	Virus titer	HAI: 1;320
	Parasite count (per µL)	NA
4.	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media used	MDCK Cell Line
	Growth/ Culturing conditions including medium used	MDCK
	FCS/ FBS used in the Medium	FCS (Fetal Calf Serum) final concentration 10%
	Cell Monolayer Confluency for infection	90%
	Time taken from infection to harvest in cell line	72 hours
	Incubation conditions and duration	37°C with 5% CO ₂ incubation for 72 hours
	Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media	NA
5.	Genomic sequence Partial/ Full GenBank ID	Full genome (<i>in process</i>)
6.	Sterility details	-
7.	Quantity of sample	2 mL
8.	Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs	Real Time PCR
9.	Sequencing technique used	Whole Genome Sequencing (WGS)
10.	PCR Conditions as applicable	NA
11.	PCR amplicon size	NA
12.	Gene/ Genotype	NA
13.	Drug resistance status	Sensitive

Note: This is a representative certificate for one Influenza B strain only from our collection of Influenza samples. Further data can be made available on request.