











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
	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	Tissue Culture Fluid (TCF)
	vectors in which these clones were developed)	
	Year of Isolation & Specimen Source	2020, Throat/ nasal swab
3.	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
	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)
4.	FBS used in the Medium	2% FBS
4.	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	Not applicable
	Chicken eggs/ Cells/ Lab animals/ Enriched media	
5.	Genomic sequence Partial/Full	Full genome: EPI_ISL_420546
	GenBank ID	
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
	Primer Sequences and mode of confirmation by PCR/	Real time RT-PCR for E gene:
	real-time PCR/ RT-PCRs	Forward:
8.		ACAGGTACGTTAATAGCGT
		Reverse: ATATTGCAGCAGTACGCACACA
		FAM-
0	0 1 1 1 1	ACACTAGCCATCCTTACTGCGCTTCG-BHQ
9.	Sequencing technique used	- T '4' 5500 C 10 ' T
	PCR Conditions as applicable	Reverse Transcription: 55°C for 10 min, Taq inhibitor inactivation: 95°C for 3 min
10.		PCR amplification (45 Cycles): 95°C for 15 sec,
10.		
		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
13.	Drug resistance status	Thot 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
	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	Tissue Culture Fluid (TCF)
	vectors in which these clones were developed)	, , ,
	Year of Isolation & Specimen Source	2018; Human (oropharyngeal swabs)
3.	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
	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media	Vero CCL-81 cell line, MEM (Minimum
	used	Essential Medium) with 2 % FBS (Fetal Bovine
		Serum)
	Growth/ Culturing conditions including medium used	MEM (Minimum Essential Medium) with 2 %
4		FBS (Fetal Bovine Serum)
4.	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
	Time taken from infection to harvest in embryonated	Not applicable
	Chicken eggs/ Cells/ Lab animals/ Enriched media	
5.	Genomic sequence Partial/ Full	Whole Genome
	GenBank ID	(MH523642)
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
	Primer Sequences and mode of confirmation by PCR/	Nipah 1209 GCA AGA GAG TAA TGT TCA
	real-time PCR/ RT-PCRs	GGC TAG AG
8.		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	
	PCR Conditions as applicable	Reverse Transcription: 50°C for 30 min
10.		Taq inhibitor inactivation: 95°C for 2 min
		PCR amplification: (40 cycles) 95°C for 15 sec
11	DCD 1'	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

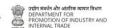












CCHFV Virus Isolates- Characterization Report

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
	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	Human serum sample
	vectors in which these clones were developed)	
	Year of Isolation & Specimen Source	2011
3.	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
	Passage details of given Virus/ Bacteria	
	Cell line used	Vero CCL-81, MEM with 2 % FBS (Fetal Bovine
		Serum)
	Growth/ Culturing conditions including medium	MEM with 2 % FBS
	used	
4.	FCS/ FBS used in the medium	2 % FBS
7.	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 % CO2
	Time taken from infection to harvest in	Not applicable
	embryonated Chicken eggs/ Cells/ Lab animals/	
	Enriched media	
5.	Genomic sequence Partial/ Full	JN627865
	GenBank ID	
6.	Sterility details	Free from Mycoplasma
7.	Quantity of sample	-
	Primer Sequences and mode of confirmation by	CCHF NP gene
8.	PCR/ real-time PCR/ RT-PCRs	F: CAAAGAAACACGTGCCGCTT
		R: ATTCACCTCGATTTTGTTTTCCAT
		P: ACGCCCACAGTGTTCTCTTGAGTGTTAGCA
9.	Sequencing technique used	Whole Genome Sequencing (WGS)
	PCR Conditions as applicable	Reverse Transcription 50°C for 5min
10.		Taq inhibitor inactivation 95°C for 20 sec
		PCR amplification (40 Cycles): 95°C for 5 Sec and
11	DCD 1' '-	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
	Virus details	
	Location (area of origin)- District/ State/ Country	(Manipura, Savli) Vadodara/Gujarat/India
	Specimen Type (in case of clones, please specify	Virus isolates from Chandipura infected
	vectors in which these clones were developed)	patient serum
	Year of Isolation & Specimen Source	Year 2024 (Human serum/ SSG Baroda hospital)
3.	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)	-
	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture	CD1 infant mice (2-day old)- 1 passage,
	media used	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.	Dulbecco's Modified Eagle Medium with
	used	10% Fetal Bovine Serum (FBS)
4.	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 0.01moi of
	T 1 2 12 11 2	infectivity dose
	Incubation conditions and duration	37°C at 5% CO ₂ and 80-90%
		Humidity duration- 24 hours
	Time taken from infection to harvest in embryonated	24 hours
	Chicken eggs/ Cells/ Lab animals/ Enriched media	
	Genomic sequence Partial/ Full GenBank ID	495 bases partial G protein (Not submitted to
5.	Genomic sequence i artial/ i un Genbank ib	GenBank)
6.	Sterility details	Not Applicable
7.	Quantity of sample	Bulk virus stock: 100mL
	Primer Sequences and mode of confirmation by PCR/	Primer sequence:
	real-time PCR/ RT-PCRs	CHP_3740(F):ACTCTCACATGGAAGGTGCT
		CHP 4262(R):CAATTCCCATACCGATCAGAT
8.		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
٦.		WGS (Whole Genome Sequencing) using
		Illumina sequencing
	PCR Conditions as applicable	One step RT-PCR and Semi- nested PCR cycling
10.		conditions













		One step RT-PCR cycling conditions.		
			Time	Cycling conditions
		50°C 3	30 min	1 cycle, Reverse transcription
		95°C 1	10 min	1 cycle; Pre-PCR
		95°C 3	30 sec	-
		56°C 3	30 sec	35 cycles; PCR amplification
		72°C 3	30 sec	-
		72°C 5	5 min	Final extension
				ing conditions.
				ing conditions.
		Semi-nested PCI		ing conditions. Cycling conditions
		Semi-nested PCI Temperature T	R cycli	
		Semi-nested PCl Temperature T 94°C 3	CR cycli Time	Cycling conditions
		Semi-nested PCI Temperature T 94°C 3 94°C 3	CR cycli Time 3 min	Cycling conditions Pre-PCR
		Semi-nested PCI Temperature T 94°C 3 94°C 3 56°C 3	CR cycli Time 3 min 30 sec	Cycling conditions Pre-PCR - 35 cycles; PCR
		Semi-nested PCI Temperature T 94°C 3 94°C 3 56°C 3 72°C 3	Time 3 min 30 sec	Cycling conditions Pre-PCR - 35 cycles; PCR
11	PCR amplicon size	Semi-nested PCI Temperature T 94°C 3 94°C 3 56°C 3 72°C 3 72°C 3 First PCR produ	CR cycli Time 3 min 30 sec 30 sec 30 sec uct size	Cycling conditions Pre-PCR - 35 cycles; PCR amplification - 1 cycle; Final extension - 522bp
11.	PCR amplicon size	Semi-nested PCI Temperature T 94°C 3 94°C 3 56°C 3 72°C 3 72°C 3 72°C 3	CR cycli Time 3 min 30 sec 30 sec 30 sec uct size	Cycling conditions Pre-PCR - 35 cycles; PCR amplification - 1 cycle; Final extension - 522bp
11. 12.	PCR amplicon size Gene/ Genotype	Semi-nested PCI Temperature T 94°C 3 94°C 3 56°C 3 72°C 3 72°C 3 First PCR produ	ER cycli Time 3 min 30 sec 30 sec 30 sec uct size	Cycling conditions Pre-PCR - 35 cycles; PCR amplification - 1 cycle; Final extension - 522bp ct size- 70bp













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)	Morbillivirus, Measles morbillivirus
	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
3.	Culture Media used for Isolation	DMEM
3.	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 μL)	
	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture	Vero hSLAM CellS/ DMEM with 10% FCS
	media used	(Fetal Calf Serum)
	Growth/ Culturing conditions including medium	37°C in 5% CO ₂ environment
	used	
4.	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	Approx. 3-5 days (depending on
	embryonated cells	cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full	Full Genome
3.	GenBank ID	MH356244
6.	Sterility details	All experiments conducted in sterile
		conditions
7.	Quantity	1mL per vial
8.	Primer Sequences and mode of confirmation by	MeV RT-PCR (Nucleoprotein gene)
	PCR/ real-time PCR/ RT-PCRs	
9.	Sequencing technique used	Sanger Sequencing
	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
10.		Sec (Denaturation), 55°C for 30 Sec
		(Annealing), 72°C for 30 Sec (Extension),
	non III	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)	Mumps, Orthorubulavirus
	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
3.	Culture Media used for Isolation	DMEM
3.	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 ^s FFU/mL
	Parasite count (per μL)	-
	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture media	Vero Cell line/ DMEM with 10% FCS (Fetal Calf
	used	Serum)
	Growth/ Culturing conditions including medium used	37°C in 5% CO ₂ environment
4.	FCS used in the Medium	5% FCS for infection
4.	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	Approx. 3-5 days (depending on
	Cells	cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full	Full Genome, KF738114
J.	GenBank ID	
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
	PCR Conditions as applicable	55°C for 30 min (cDNA), 94°C for 2 min (Hot
	Tex conditions as applicable	start), followed by 40 cycles of 94°C for 15 Sec
10.		(Denaturation), 55°C for 30 Sec (Annealing),
10.		72°C for 30 Sec (Extension), Final extension
		72°C for 7 min and 4°C (hold).
11	1	
11.	PCR amplicon size	656bp
11. 12.	PCR amplicon size Gene/ Genotype	656bp Small Hydrophobic gene/ Genotype-G

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)	Rubivirus, Rubivirus rubellae
	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
3.	Culture Media used for Isolation	DMEM
3.	Name of Depositors (Internal)	Dr. Sunil R. Vaidya
	NCBI Accession Number / Institute ID	*MH745077/ NIVID 924773
	Year of Accession Number	2019
	Virus titer	10⁵ FFU/mL
	Parasite count (per μL)	-
	Passage details of given Virus	
	Cell line / Lab Animal/ Name of specific culture media	Vero hSLAM CellS/ DMEM with 10% FCS
	used	(Fetal Calf Serum)
	Growth/ Culturing conditions including medium used	37°C in 5% CO ₂ environment
4.	FCS used in the Medium	5% FCS for infection
4.	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	Approx. 5-7 days (depending on
	Cells	cytopathic effect in the cells)
5.	Genomic sequence Partial/ Full	Full Genome
	GenBank ID	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
	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
10.		(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

1. Name of the Institute possessing the sample 2. Type of Virus / Bacteria/Protozoa (Genus and Species name) Virus / Bacteria/Protozoa Strain details Location (area of origin) - District/ State/ Country Specimen Type (in case of clones, please specify vectors in which these clones were developed) Year of Isolation & Specimen Source 2024, Aedes mosquito Cultrure Media used for Isolation Vero cel81 Name of Depositors (Internal/ External) Dr. Kawita S Lole NCBI Accession Number / Institute ID PQ461653 Year of Accession Number Depositors (Internal/ External) Dr. Kawita S Lole NCBI Accession Number 2025 Virus titer 3.5 X10 ⁵ IU/mL Parasite count (per μL) Not Available Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used FCS/ FBS used in the Medium 10% FBS (Fetal Bovine Serum) Cell Monolayer Confluency for infection 90% Incubation conditions and duration 37°C, 5% CO ₂ , 2% MEM maintenance media 10% FBS (Fetal Bovine Serum) Cell Monolayer Confluency for infection 90% Incubation conditions and duration 37°C, 5% CO ₂ , 7-10 days Not Available Not Available 5. Genomic sequence Partial/ Full Serulis Serulis	Sr. No.	Description of the Item	Details
2. Type of Virus / Bacteria/Protozoa (Genus and Species name) Virus / Bacteria/Protozoa Strain details Location (area of origin) - District/ State/ Country Specimen Type (in case of clones, please specify vectors in which these clones were developed) Year of Isolation & Specimen Source 2024, Aedes mosquito Vero ccl81 Name of Depositors (Internal/ External) Dr. Kavita S Lole NCBI Accession Number / Institute ID PQ461653 Year of Accession Number / Institute ID PQ461653 Year of Accession Number / Institute ID PA461653 Year of Accession Number 2025 Virus titer 3.5 X10 ⁵ IU/mL Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used Invalidation Invalidation Gell Monolayer Confluency for infection 90% FSC/ FBS used in the Medium Invalidation	1.	Name of the Institute possessing the sample	ICMR – National Institute of Virology, Pune
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) Year of Isolation & Specimen Source 2024, Aedes mosquito Vero cel81	2.		
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) Year of Isolation & Specimen Source 2024, Aedes mosquito Vero cel81		(Genus and Species name)	
Specimen Type (in case of clones, please specify vectors in which these clones were developed) Year of Isolation & Specimen Source Culture Media used for Isolation Name of Depositors (Internal/ External) Name of Depositors (Internal/ External) Name of Depositors (Internal/ External) Pear of Accession Number Vero ccl81 Name of Depositors (Internal/ External) Pear of Accession Number Virus titer Parasite count (per µL) Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used 37°C, 5% CO ₂ , 2% MEM maintenance media 10% FBS (Fetal Bovine Serum) 90% Time taken from infection to harvest in cell line Incubation conditions and duration Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media Genomic sequence Partial/ Full Genomic sequence Partial/ Full Genomic sequence Partial/ Full Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs Proverard: CCGCTGCCCAACACAAG Reverse: CCACTAACGTTCTTTTGCAGACAT Probe: FAM- AGCTACCTTGACAAGCAGTCAGACAT Probe: FAM- AGCTACCTTGACAAGCAGTCAGACACTCAA 9. Sequencing technique used Standard sequencing PCR Conditions as applicable PCR Conditions as applicable PCR amplicon size Not Applicable			
Vectors in which these clones were developed) Year of Isolation & Specimen Source 2024, Aedes mosquito		Location (area of origin)- District/ State/ Country	Pune, Maharashtra, India
Year of Isolation & Specimen Source 2024, Aedes mosquito		Specimen Type (in case of clones, please specify	NA
Culture Media used for Isolation Name of Depositors (Internal/ External) Dr. Kavita S Lole 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 μL) Not Available Passage details of given Virus/ Bacteria Vero ccl81, MEM culture media media used 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 Not Available Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media Segonomic sequence Partial/ Full Full sequence GenBank ID Not Available Sterility details Not Available 7. Quantity of sample 100 μL/mL Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs Probe: FAM-AGCCTACCTTGACAACCACAAG Reverse: CCACTAAACGTTCTTTTGCAGACAT Probe: FAM-AGCCTACCTTGACAAGCAGTCAGACACTCAA Sequencing technique used Standard sequencing PCR Conditions as applicable 48°C - 15 min 95°C - 2 min. 95°C - 15 sec. 60°C - 1 min. 95°C - 15 sec. 60°C - 1 min. 11. PCR amplicon size Not Applicable		vectors in which these clones were developed)	
Name of Depositors (Internal/ External) Dr. Kavita S Lole		Year of Isolation & Specimen Source	2024, Aedes mosquito
NCBI Accession Number / Institute ID PQ461653 Year of Accession Number 2025 Virus titer 3.5 X 10 ⁵ IU/mL Parasite count (per μL) Not Available Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used FCS/ FBS used in the Medium 10% FBS (Fetal Bovine Serum) Cell Monolayer Confluency for infection 7-10 days Incubation conditions and duration 7-10 days Incubation	3.		
Vear of Accession Number 2025		Name of Depositors (Internal/ External)	Dr. Kavita S Lole
Virus titer Parasite count (per μL) Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used FCS/ FBS used in the Medium Cell Monolayer Confluency for infection Time taken from infection to harvest in cell line Incubation conditions and duration Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media Senomic sequence Partial/ Full GenBank ID Cuantity of sample Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs PCR Conditions as applicable PCR Conditions as applicable 10. PCR amplicon size Not Applicable Not Applicable Not Applicable Not Applicable		NCBI Accession Number / Institute ID	PQ461653
Parasite count (per µL) Passage details of given Virus/ Bacteria Cell line / Lab Animal/ Name of specific culture media used Growth/ Culturing conditions including medium used FCS/ FBS used in the Medium Cell Monolayer Confluency for infection Time taken from infection to harvest in cell line Incubation conditions and duration Time taken from infection to harvest in embryonated Chicken eggs/ Cells/ Lab animals/ Enriched media Genomic sequence Partial/ Full GenBank ID Sterility details Quantity of sample Primer Sequences and mode of confirmation by PCR/ real-time PCR/ RT-PCRs PCR Conditions as applicable PCR Conditions as applicable 10. PCR amplicon size Not Available Available Not Available Forward: CCGCTGCCCAACACAAG Reverse: CCACTAACGTTCTTTTGCAGACACTCAA Standard sequencing PCR Conditions as applicable 48°C – 15 min 95°C – 2 min. 95°C – 2 min. 95°C – 2 min. 95°C – 15 sec. 60°C – 1 min. Not Applicable Not Applicable		Year of Accession Number	
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11. PCR amplicon size Not Applicable 12. Gene/ Genotype Not Applicable	10.		
11.PCR amplicon sizeNot Applicable12.Gene/ GenotypeNot Applicable			
12. Gene/ Genotype Not Applicable	11.	PCR amplicon size	
13. Drug resistance status Not Available	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	Influenza is an RNA virus of Orthomyxovirus genus.
	(Genus and Species name)	, ,
	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	Not Applicable
	vectors in which these clones were developed)	
	Year of Isolation & Specimen Source	2025
3.	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
	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	
4.	FCS/ FBS used in the Medium	FCS (Fetal Calf Serum) final Concentration 10%
4.	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
F	Genomic sequence Partial/ Full	Full genome -
5.	GenBank ID	EPI ISL 20125456
6.	Sterility details	Not Available
7.	Quantity of sample	2 mL
8.	Primer Sequences and mode of confirmation by PCR/	Real Time PCR
	real-time PCR/ RT-PCRs	
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	Influenza is an RNA virus of Orthomyxovirus genus.
	(Genus and Species name)	, .
	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	Not Applicable
	vectors in which these clones were developed)	
	Year of Isolation & Specimen Source	2025
3.	Culture Media used for Isolation	MDCK cells maintained in Minimum Essential Medium
		(MEM) with 150μL TPCK trypsin/mL and 50 μL
	7. 45	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
	Passage details of given Virus/ Bacteria	A D CW C 11 L
	Cell line / Lab Animal/ Name of specific culture	MDCK Cell Line
	media used	
	Growth/ Culturing conditions including medium used	EGG (F + 1 G 10 G) (* 1 + + + * 100/
4.	FCS used in the Medium	FCS (Fetal Calf Serum)- final concentration 10%
	Cell Monolayer Confluency for infection 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	NA NA
	Chicken eggs/ Cells/ Lab animals/ Enriched media Genomic sequence Partial/ Full	Full genome
5.	GenBank ID	EPI ISL 20075868
6.	Sterility details	<u>LII ISL 20073000</u>
7.	Quantity of sample	2 mL
	Primer Sequences and mode of confirmation by PCR/	Real Time PCR
8.	real-time PCR/ RT-PCRs	Tom Time I OIL
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	Influenza is an RNA virus of Orthomyxovirus genus
	(Genus and Species name)	
	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	Not Applicable
	vectors in which these clones were developed)	
	Year of Isolation & Specimen Source	2025
3.	Culture Media used for Isolation	MDCK cells maintained in Minimum Essential Medium
J.		(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
	Passage details of given Virus/ Bacteria	
	Cell line / Lab Animal/ Name of specific culture	MDCK Cell Line
	media used	
	Growth/ Culturing conditions including medium used	MDCK
4.	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	NA
	Chicken eggs/ Cells/ Lab animals/ Enriched media	
5.	Genomic sequence Partial/ Full	Full genome (in process)
	GenBank ID	
6.	Sterility details	- 2 I
7.	Quantity of sample Primer Sequences and mode of confirmation by PCR/	2 mL Real Time PCR
8.	real-time PCR/ RT-PCRs	Real Time PCK
9.	Sequencing technique used	Whale Comama Seguencing (WCS)
10.	PCR Conditions as applicable	Whole Genome Sequencing (WGS) NA
11.	PCR conditions as applicable PCR amplicon size	NA NA
12.	Gene/ Genotype	NA NA
13.		Sensitive Sensitive
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.