Table S1; qPCR Ct values of SARS-CoV-2 positive lion samples

Samples	Type	Day of collection	Gene 1 (E Gene)	Gene 2 (RdRP)	Gene 3 (HKU ORF)
Lion 1	Nasal Swab	1	33.5	34.0	34.2
Lion 2	Nasal Swab	1	30.2	31.3	34.4
Lion 3	Nasal Swab	1	26.8	25.4	26.7
Lion 1	Rectal Swab	1	34.5	33.2	34.1
Lion 2	Rectal Swab	1	29.9	32.2	33.6
Lion 3	Rectal Swab	1	29.4	27.1	28.1
Lion 1	Nasal Swab	4	24.1	25.5	24.9
Lion 2	Nasal Swab	4	34.4	34.1	33.9
Lion 3	Nasal Swab	4	29.8	32.5	33.6
Lion 1	Rectal Swab	4	27.9	26.3	29.1
Lion 2	Rectal Swab	4	34.1	33.9	33.4
Lion 3	Rectal Swab	4	30.1	29.8	28.9
Lion 1	Nasal Swab	21	No Ct	No Ct	No Ct
Lion 2	Nasal Swab	21	No Ct	No Ct	No Ct
Lion 3	Nasal Swab	21	No Ct	No Ct	No Ct
Lion 1	Rectal Swab	21	No Ct	No Ct	No Ct
Lion 2	Rectal Swab	21	No Ct	No Ct	No Ct
Lion 3	Rectal Swab	21	No Ct	No Ct	No Ct

Table S2: List of primers and probes used in the study. The primers/ probe targeting E, RdRP and HKU were used for detection of SARS-CoV2. Whereas other sets of primers were used for amplification of respective genes and sequencing in Sanger sequencing methods.

Name	Sequence	Target location	Purpose	REF
fwd_E	ACAGGTACGTTAATAGTTAATAGCGT	E gene	Detection of Seba group of Corona virus	WHO
rev_E	ATATTGCAGCAGTACGCACACA			
E-probe	6FAM ACACTAGCCATCCTTACTGCGCTTCG			
Rdrp_F	GTGARATGGTCATGTGTGGCGG	RdRP gene	Confirmatory assay for SARS-CoV2	WHO
Rdrp_R	CARATGTTAAASACACTATTAGCATA			
RdRPprobe	Cy5-CAGGTGGAACCTCATCAGGAGATGC			
HKU_F	TGGGGYTTTACRGGTAACCT	ORF1ab	Confirmatory assay for SARS-CoV2	WHO
HKU_R	AACRCGCTTAACAAAGCACTC			
HKUprobe	VIC-TAGTTGTGATGCWATCATGACTAG			
CV-EF1	TGGGAATCTGGAGTAAAAGACTGT	E gene	Amplification of complete E gene	Designed in this study
CV-ER1	AGTACCGTTGGAATCTGCCAT			
CV-NF1	GAATTGTGCGTGGATGAGGC	N Gene	Amplification of complete N gene	Designed in this study
CV-NR1	ATAGCCCATCTGCCTTGTGT			
CV-S1F	TATCTTGGCAAACCACGCGA	S Gene	Amplification of partial S gene	Designed in this study
CV-S1R	ACCAGCTGTCCAACCTGAAG			

CV-S2F	TCTTCTTCAGGTTGGACAGC		Amplification of partial S gene	Designed in this study
CV-S2R	CTGTGGATCACGGACAGCAT			
CV-S3F	CTATCAGGCCGGTAGCACAC		Amplification of partial S gene	Designed in this study
CV-S3R	CGCCAACAATAAGCCATCCG			
CVR3	ACACCATGAGGTGCTGACTG		Sequencing of CVR3	Designed in this study

Table S3. Comparison of nucleotide and amino acid mutations between SARS-CoV-2 strains

Nucleotide Position	Subject	Tripur_Amino acid change
65	Lion 1	
210	Both Lions	-
241	Both Lions	-
1191	Lion 1	Pro309Leu
1267	Lion 1	Gly334Gly
3037	Both Lions	Phe924Phe
5184	Both Lions	Pro1640Leu
5539	Lion 3	Gln1758Gln
5784	Lion 3	Thr1840Ile
9891	Both Lions	Ala3209Val
11418	Both Lions	Val3718Ala
11514	Lion 3	Thr3750Ile
12946	Lion 1	Tyr4227Tyr
14408	Both Lions	Pro4715Leu
14829	Lion 3	Met4855Ile
15451	Both Lions	Gly5063Ser
16466	Both Lions	Pro5401Leu
16610	Lion 3	Thr5449Asn
18213	Lion 1	Met5983Ile
20262	Lion 1	Leu6666Leu
20320	Lion 1	His6686Tyr
21618	Both Lions	Thr19Arg
21622	Lion 1	Thr20Thr
22227		Ala222Val
22917	Both Lions	Leu452Arg
22995	Both Lions	Thr478Lys
23403	Both Lions	Asp614Gly
23604	Both Lions	Pro681Arg
24745	Lion 1	Val1061Val
25469	Both Lions	Ser26Leu
26767	Both Lions	Ile82Thr
27638	Both Lions	Val82Ala
27739	Lion 1	Leu116Phe
27752	Both Lions	Thr120Ile
28253	Lion 1	Phe120Leu
28881	Lion 3	Arg203Met
29320	Lion 3	Gln349His
29402	Both Lions	Asp377Tyr
29427	Lion 1	Arg385Lys
29742	Both Lions	-