

Table 2. Variations in the JN.1 nucleotide sequences detected by the Ion Torrent, Optimized Ion Torrent, Illumina, and Nanopore platforms.

SNP/del/ MPLF	Amino Acid Substitution and Region	Ion Torrent	Optimized Ion Torrent	Illumina/ MicroFuture Primer 1	Illumina/ MicroFuture Primer 1+2	Nanopore/ BaiYi
C44T	-	T	T	T	T	T
C241T	-	T	T	T	T	T
T670G	ORF1a S135R	G	G	G	G	G
C897A	ORF1a A211D	A	A	A	A	A
C2790T	ORF1a T842I	T	T	T	T	T
C3037T	-	T	T	T	T	T
G3431T	ORF1a V1056L	T	T	T	T	T
T3565C	-	C	C	C	C	C
G4184A	ORF1a G1307S	A	A	A	A	A
C4321T	-	T	T	T	T	T
A6183G	ORF1a K1973R	G	G	G	G	G
A7842G	ORF1a N2526S	G	G	N.D	P.D	G
C8293T	-	T	T	T	T	T
G8393A	ORF1a A2710T	A	A	A	A	A
C9344T	ORF1a L3027F	T	T	T	T	T
A9424G	-	G	G	G	G	G
C9534T	ORF1a T3090I	T	T	T	T	T
C10029T	ORF1a T3255I	T	T	T	T	T
C10198T	-	T	T	T	T	T
G10447A	ORF1a P3395H	A	A	A	A	A
C10449A	-	A	A	A	A	A
G11042T	ORF1a V3593F	T	T	T	T	T
11287 Del	ORF1a S3675-G3676-F3677-	GTCTGGTTTT-G	GTCTGGTTTT-G	GTCTGGTTTT-G	GTCTGGTTTT-G	GTCTGGTTTT-G
G11727A	ORF1a R3821K	A	A	A	A	A
C12789T	ORF1a T4175I	T	T	T	T	T
C12815T	-	T	T	T	T	T
C12880T	-	T	T	T	T	T
T13339C	-	C	C	P.D	C	C
C14408T	ORF1b P314L	T	T	T	T	T
C15714T	-	T	T	T	T	T
T15756A	-	A	A	A	A	A
C17410T	ORF1b R1315C	T	T	T	T	T
A18163G	ORF1b I1566V	G	G	G	G	G
A18492G	-	G	G	G	G	G
C18894T	-	T	T	T	T	T

C19955T	ORF1b:T2163I	T	T	T	T	T
A20055G	-	G	G	G	G	G
21608	S 16 MPLF	G-GTCATGCCGC TGT	G-GTCATGCCGC TGT	G-GTCATGCCGC TGT	G-GTCATGCCGC TGT	G-GTCATGCCGC TGT
C21618T	S T19I	T	T	P.D	P.D	T
C21622T	S R21T	T	T	P.D	P.D	T
21632	S L24-,P25-,P26-,A27S	TTACCCCCTG- T	TTACCCCCTG- T	P.D	P.D	TTACCCCCTG- T
C21711T	S S50L	T	T	P.D	P.D	T
21764 Del	S H69-V70-	ATACATG-A	ATACATG-A	ATACATG-A	ATACATG-A	ATACATG-A
G21941T	S V127F	T	T	T	T	T
G21987A	S G142D	A	A	A	A	A
21990 Del	S Y144-	TTTA-T	TTTA-T	TTTA-T	TTTA-T	TTTA-T
T22032C	S F157S	C	C	C	C	C
C22033A	S R158G	A	A	A	A	A
A22034G	-	G	G	G	G	G
22193	S N211-,L212I	AATT-A	AATT-A	AATT-A	AATT-A	AATT-A
T22200G	S V213G	G	G	G	G	G
C22208T	S L216F	T	T	T	T	T
C22295A	S H245N	A	A	A	A	A
C22353A	S A264D	A	A	A	A	A
A22556G	S I332V	G	G	G	G	G
G22577C	S G339H	C	C	C	C	C
G22578A		A	A	A	A	A
A22629C	S K356T	C	C	C	C	C
C22674T	S S371F	T	T	T	T	T
T22679C	S S373P	C	C	C	C	C
C22686T ^a	S S375F,T376A	N.D	T	T	T	T
A22688G ^a	-	N.D	G	G	G	G
G22770A	S R403K	N.D	A	A	A	A
G22775A	S D405N	N.D	A	A	A	A
A22786C	S R408S	N.D	C	C	C	C
G22813T	S K417N	N.D	T	T	T	T
T22882G	S N440K	N.D	G	G	G	G
G22895C	S V445H,G446S	N.D	C	C	C	C
T22896A	-	N.D	A	A	A	A
G22898A ^a	-	N.D	A	A	A	A
A22910G ^a	S N450D	N.D	G	G	G	G
C22916T	S L452W	N.D	T	T	T	T
T22917G	-	N.D	G	G	G	G
T22926C	S L455S	C	C	C	C	C
T22942A	S N460K	A	A	A	A	A

G22992A ^a	S S477N,T478K	A	A	A	A	A
C22995A ^a	-	A	A	A	A	A
T23005A	S N481K	A	A	A	A	A
23009 G23012A	S V483- & E484K	GTTG-A	GTTG-A	GTTG-A	GTTG-A	GTTG-A
T23018C	S F486P	C	C	C	C	C
T23019C	-	C	C	C	C	C
A23055G	S Q498R	N.D	G	G	G	G
A23063T	S N501Y	N.D	T	T	T	T
T23075C	S Y505H	N.D	C	C	C	C
G23222A	S E554K	A	A	A	A	A
C23271T	S A570V	T	T	T	T	T
A23403G	S D614G	G	G	G	G	G
C23423T	S P621S	T	T	T	T	T
C23525T	S H655Y	T	T	T	T	T
T23599G	S N679K	G	G	G	G	G
C23604G	S P681R	G	G	G	G	G
C23854A	S N764K	A	A	A	A	A
G23948T	S D796Y	T	T	T	T	T
C24378T	S S939F	T	T	T	T	T
A24424T	S Q954H	T	T	T	T	T
T24469A	S N969K	A	A	A	A	A
C24990T	S P1143L	T	T	T	T	T
C25000T	-	T	T	T	T	T
C25207T	-	T	T	T	T	T
C25584T	-	T	T	T	T	T
C26060T	ORF3a T223I	T	T	T	T	T
C26270T	-	T	T	T	T	T
G26529C	M D3H	C	C	C	C	C
C26577G	M Q19E	G	G	G	G	G
A26610G	M T30A	G	G	G	G	G
C26681T	-	T	T	T	T	T
G26709A	M A63T	A	A	A	A	A
C26833T	M A104V	T	T	T	T	T
C26858T	-	T	T	T	T	T
A27259C	-	C	C	C	C	C
G27382C	ORF6 D61L	C	C	C	C	C
A27383T	-	T	T	T	T	T
T27384C	-	C	C	C	C	C
C27807T	ORF7b F19L	T	T	T	T	T
T27810C	-	C	C	C	C	C

A28271T	-	T	T	T	T	T
C28311T	N P13L	T	T	T	T	T
28361 Del	N E31-,R32-,S33-	GGAGAACGCA -G	GGAGAACGCA -G	GGAGAACGCA -G	GGAGAACGCA -G	GGAGAACGCA -G
G28881A	N R203K	A	A	A	A	A
G28882A	N G204R	A	A	A	A	A
G28883C	-	C	C	C	C	C
C28958A	N Q229K	A	A	A	A	A
A29510C	N S413R	C	C	C	C	C
29733 Del	ORF9b P10S	CGAGGCCACG CGGAGTACGA TCGAGTG-C	CGAGGCCACG CGGAGTACGA TCGAGTG-C	CGAGGCCACG CGGAGTACGA TCGAGTG-C	CGAGGCCACG CGGAGTACGA TCGAGTG-C	CGAGGCCACG CGGAGTACGA TCGAGTG-C
Del	ORF9b E27-,N28-,A29-	-	-	-	-	-

Notes: ^aMutations in two adjacent base sites cause mutations in two amino acids. N.D, not detected; P.D, partially detected.