**Severe acute respiratory syndrome coronavirus 2 isolate SARS-CoV-2/human/USA/NY-PBRI-22M008/2022, complete genome**

GenBank: ON221861.1

[FASTA](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?report=fasta) [Graphics](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?report=graph)

[Go to:](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1" \l "goto2222566343_0)

LOCUS ON221861 29714 bp RNA linear VRL 13-APR-2022

DEFINITION Severe acute respiratory syndrome coronavirus 2 isolate

SARS-CoV-2/human/USA/NY-PBRI-22M008/2022, complete genome.

ACCESSION ON221861

VERSION ON221861.1

KEYWORDS .

SOURCE Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

ORGANISM [Severe acute respiratory syndrome coronavirus 2](https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=2697049)

Viruses; Riboviria; Orthornavirae; Pisuviricota; Pisoniviricetes;

Nidovirales; Cornidovirineae; Coronaviridae; Orthocoronavirinae;

Betacoronavirus; Sarbecovirus.

REFERENCE 1 (bases 1 to 29714)

AUTHORS Ye,D.Z. and Liu,Y.

TITLE Direct Submission

JOURNAL Submitted (12-APR-2022) Department of Genomics, PrimBio Research

Institute, 665 Stockton Drive, STE 200 I, Exton, PA 19341, USA

COMMENT ##Assembly-Data-START##

Assembly Method :: Torrent Suite SARS-CoV-2 Plugin v. 2021

Sequencing Technology :: IonTorrent

##Assembly-Data-END##

FEATURES Location/Qualifiers

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GSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGTDTTITVN

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UOU25759.1?from=1&to=180) 243..782

/gene="ORF1ab"

/product="leader protein"

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UOU25759.1?from=4251&to=4389) 12993..13409

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[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=13444&to=13471) 13444..13471

/gene="ORF1ab"

/note="Coronavirus frameshifting stimulation element

stem-loop 1"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=13456&to=13510) 13456..13510

/gene="ORF1ab"

/note="Coronavirus frameshifting stimulation element

stem-loop 2"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=21531&to=25343) 21531..25343

/gene="S"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=21531&to=25343) 21531..25343

/gene="S"

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EGVFVSNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDPLQPELDSFK

EELDKYFKNHTSPDVDLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYE

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=25352&to=26179) 25352..26179

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=25352&to=26179) 25352..26179

/gene="ORF3a"

/codon\_start=1

/product="ORF3a protein"

/protein\_id="[UOU25761.1](https://www.ncbi.nlm.nih.gov/protein/2222566347)"

/translation="MDLFMRIFTIGTVTLKQGEIKDATPSDFVRATATIPIQASLPFG

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NSVTSSIVITSGDGTTSPISEHDYQIGGYTEKWESGVKDCVVLHSYFTSDYYQLYSTQ

LSTDIGVEHVTFFIYNKIVDEPEEHVQIHTIDGSSGVVNPVMEPIYDEPTTTTSVPL"

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/gene="E"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=26204&to=26431) 26204..26431

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/codon\_start=1

/product="envelope protein"

/protein\_id="[UOU25762.1](https://www.ncbi.nlm.nih.gov/protein/2222566348)"

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/gene="M"

/codon\_start=1

/product="membrane glycoprotein"

/protein\_id="[UOU25763.1](https://www.ncbi.nlm.nih.gov/protein/2222566349)"

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IKDLPKEITVATSRTLSYYKLGASQRVAGDSGFAAYSRYRIGNYKLNTDHSSSSDNIA

LLVQ"

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27161&to=27346) 27161..27346

/gene="ORF6"

/codon\_start=1

/product="ORF6 protein"

/protein\_id="[UOU25764.1](https://www.ncbi.nlm.nih.gov/protein/2222566350)"

/translation="MFHLVDFQVTIAEILLIIMRTFKVSIWNLDYIINLIIKNLSKSL

TENKYSQLDEEQPMEIL"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27353&to=27718) 27353..27718

/gene="ORF7a"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27353&to=27718) 27353..27718

/gene="ORF7a"

/codon\_start=1

/product="ORF7a protein"

/protein\_id="[UOU25765.1](https://www.ncbi.nlm.nih.gov/protein/2222566351)"

/translation="MKIILFLALITLATCELYHYQECVRGTTVLLKEPCSSGTYEGNS

PFHPLADNKFALTCFSTQFAFACPDGVKHVYQLRARSVSPKLFIRQEEVQELYSPIFL

IVAAIVFITLCFTLKRKTE"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27715&to=27846) 27715..27846

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/gene="ORF7b"

/codon\_start=1

/product="ORF7b"

/protein\_id="[UOU25766.1](https://www.ncbi.nlm.nih.gov/protein/2222566352)"

/translation="MIELSLIDFYLCFLAFLLFLVLIMLIIFWFSLELQDHNETCHA"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27853&to=28218) 27853..28218

/gene="ORF8"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=27853&to=28218) 27853..28218

/gene="ORF8"

/codon\_start=1

/product="ORF8 protein"

/protein\_id="[UOU25767.1](https://www.ncbi.nlm.nih.gov/protein/2222566353)"

/translation="MKFLVFLGIITTVAAFHQECSLQSCTQHQPYVVDDPCPIHFYSK

WYIRVGARKSAPLIELCVDEAGSKSPIQYIDIGNYTVSCLPFTINCQEPKLGSLVVRC

SFYEDFLEYHDVRVVLDFI"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=28233&to=29483) 28233..29483

/gene="N"

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/gene="N"

/codon\_start=1

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/protein\_id="[UOU25768.1](https://www.ncbi.nlm.nih.gov/protein/2222566354)"

/translation="MSDNGPQNQRNALRITFGGPSDSTGSNQNGGARSKQRRPQGLPN

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GTTLPKGFYAEGSRGGSQASSRSSSRSRNSSRNSTPGSSKRTSPARMAGNGGDAALAL

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=29508&to=29624) 29508..29624

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=29508&to=29624) 29508..29624

/gene="ORF10"

/codon\_start=1

/product="ORF10 protein"

/protein\_id="[UOU25769.1](https://www.ncbi.nlm.nih.gov/protein/2222566355)"

/translation="MGYINVFAFPFTIYSLLLCRMNSRNYIAQVDVVNFNLT"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=29559&to=29594) 29559..29594

/gene="ORF10"

/note="Coronavirus 3' UTR pseudoknot stem-loop 1"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=29579&to=29607) 29579..29607

/gene="ORF10"

/note="Coronavirus 3' UTR pseudoknot stem-loop 2"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/ON221861.1?from=29678&to=29692) 29678..29692

/note="Coronavirus 3' stem-loop II-like motif (s2m)"

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