**Severe acute respiratory syndrome coronavirus 2 isolate SARS-CoV-2/human/USA/NJ-CDC-LC0432545/2021 ORF1ab polyprotein (ORF1ab) and ORF1a polyprotein (ORF1ab) genes, partial cds; and surface glycoprotein (S), ORF3a protein (ORF3a), envelope protein (E), membran...**

GenBank: OM043984.1

[FASTA](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?report=fasta) [Graphics](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?report=graph)

[Go to:](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1" \l "goto2170881484_0)

LOCUS OM043984 29086 bp RNA linear VRL 28-DEC-2021

DEFINITION Severe acute respiratory syndrome coronavirus 2 isolate

SARS-CoV-2/human/USA/NJ-CDC-LC0432545/2021 ORF1ab polyprotein

(ORF1ab) and ORF1a polyprotein (ORF1ab) genes, partial cds; and

surface glycoprotein (S), ORF3a protein (ORF3a), envelope protein

(E), membrane glycoprotein (M), ORF6 protein (ORF6), ORF7a protein

(ORF7a), ORF7b (ORF7b), ORF8 protein (ORF8), nucleocapsid

phosphoprotein (N), and ORF10 protein (ORF10) genes, complete cds.

ACCESSION OM043984

VERSION OM043984.1

DBLINK BioProject: [PRJNA716984](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA716984)

KEYWORDS purposeofsampling:baselinesurveillance.

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 29086)

AUTHORS Howard,D., Batra,D., Cook,P.W., Caravas,J., Rambo-Martin,B.,

Sammons,S., Unoarumhi,Y., Schmerer,M., Lacek,K.A., Kendall,T.,

Caban Figueroa,V., Morrison,S., Gulvick,C., Agarwal,M., Almasri,E.,

Boles,D., Burns,A., Charoensri,N., Cohen,O., Countryman,S.,

Cristobal,M.A., Croy,B., Dale,S., Deshmukh,H., Douglas,A.,

Drouillon,V., Eisenberg,M., Engler,H., Ghatti,R., Gupta,P.,

Hicks,S., Humphrey,J., Iyer,L., Pfefferle,L., Jain,M., Robinson,M.,

Kolli,M., Krueger,B., Kuphal,T., Letovsky,S., Levandoski,M.,

Lukasik,C., Meltzer,J., Norvell,B., Nye,M., Parker,S.,

Petropoulos,C., Pruitt,J., Ragan,S., Ryan,S., Sapeta,M.,

Schroth,J., Selvaraju,S.B., Stevovic,G., Suchanek,A., Throop,A.,

Tilson,L., Urban,T., Voshell,J., Wagner,K., Williams,J.,

Williamson,M., Zeng,Q., Zwiefelhofer,T., Paden,C.R. and

MacCannell,D.

TITLE CDC Sars CoV2 Sequencing Baseline Constellation

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 29086)

AUTHORS Howard,D., Batra,D., Cook,P.W., Caravas,J., Rambo-Martin,B.,

Sammons,S., Unoarumhi,Y., Schmerer,M., Lacek,K.A., Kendall,T.,

Caban Figueroa,V., Morrison,S., Gulvick,C., Sula,E., Agarwal,M.,

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Gupta,P., Hicks,S., Humphrey,J., Iyer,L., Pfefferle,L., Jain,M.,

Robinson,M., Kolli,M., Krueger,B., Kuphal,T., Letovsky,S.,

Levandoski,M., Lukasik,C., Meltzer,J., Norvell,B., Nye,M.,

Parker,S., Petropoulos,C., Pruitt,J., Ragan,S., Ryan,S., Sapeta,M.,

Schroth,J., Selvaraju,S.B., Stevovic,G., Suchanek,A., Throop,A.,

Tilson,L., Urban,T., Voshell,J., Wagner,K., Williams,J.,

Williamson,M., Zeng,Q., Zwiefelhofer,T., Paden,C.R. and

MacCannell,D.

TITLE Direct Submission

JOURNAL Submitted (28-DEC-2021) Respiratory Viruses Branch, Division of

Viral Diseases, Centers for Disease Control and Prevention, 1600

Clifton Rd, Atlanta, GA 30329, USA

COMMENT ##Assembly-Data-START##

Assembly Method :: CLC Genomics

Sequencing Technology :: PacBio Sequel II

##Assembly-Data-END##

FEATURES Location/Qualifiers

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YPNASFDNFKFVCDNIKFADDLNQLTGYKKPASRELKVTFFPDLNGDVVAIDYKHYTP

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/gene="ORF1ab"

/product="leader protein"

[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UHS10951.1?from=46&to=683) 136..2049

/gene="ORF1ab"

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UHS10951.1?from=684&to=2627) 2050..7881

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UHS10951.1?from=3128&to=3433) 9382..10299

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UHS10951.1?from=3721&to=3803) 11161..11409

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UHS10951.1?from=3804&to=4001) 11410..12003

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/note="Coronavirus frameshifting stimulation element

stem-loop 1"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=12806&to=12860) 12806..12860

/gene="ORF1ab"

/note="Coronavirus frameshifting stimulation element

stem-loop 2"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=20881&to=24693) 20881..24693

/gene="S"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=20881&to=24693) 20881..24693

/gene="S"

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CTFEYVSQPFLMDLEGKQGNFKNLREFVFKNIDGYFKIYSKHTPIIVREPEDLPQGFS

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EGVFVSNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDPLQPELDSFK

EELDKYFKNHTSPDVDLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYE

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KGVKLHYT"

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=24702&to=25529) 24702..25529

/gene="ORF3a"

/codon\_start=1

/product="ORF3a protein"

/protein\_id="[UHS10953.1](https://www.ncbi.nlm.nih.gov/protein/2170881488)"

/translation="MDLFMRIFTIGTVTLKQGEIKDATPSDFVRATATIPIQASLPFG

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NSVTSSIVITSGDGTTSPISEHDYQIGGYTEKWESGVKDCVVLHSYFTSDYYQLYSTQ

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=25554&to=25781) 25554..25781

/gene="E"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=25554&to=25781) 25554..25781

/gene="E"

/codon\_start=1

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/protein\_id="[UHS10954.1](https://www.ncbi.nlm.nih.gov/protein/2170881489)"

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NIVNVSLVKPSFYVYSRVKNLNSSRVPDLLV"

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/protein\_id="[UHS10955.1](https://www.ncbi.nlm.nih.gov/protein/2170881490)"

/translation="MAGSNGTITVEELKKLLEEWNLVIGFLFLTWICLLQFAYANRNR

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LLVQ"

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/gene="ORF6"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=26511&to=26696) 26511..26696

/gene="ORF6"

/codon\_start=1

/product="ORF6 protein"

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TENKYSQLDEEQPMEID"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=26703&to=27068) 26703..27068

/gene="ORF7a"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=26703&to=27068) 26703..27068

/gene="ORF7a"

/codon\_start=1

/product="ORF7a protein"

/protein\_id="[UHS10957.1](https://www.ncbi.nlm.nih.gov/protein/2170881492)"

/translation="MKIILFLALITLATCELYHYQECVRGTTVLLKEPCSSGTYEGNS

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/gene="ORF7b"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=27065&to=27196) 27065..27196

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=27203&to=27568) 27203..27568

/gene="ORF8"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=27203&to=27568) 27203..27568

/gene="ORF8"

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/protein\_id="[UHS10959.1](https://www.ncbi.nlm.nih.gov/protein/2170881494)"

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SFYEDFLEYHDVRVVLDFI"

[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=27583&to=28833) 27583..28833

/gene="N"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=27583&to=28833) 27583..28833

/gene="N"

/codon\_start=1

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EQTQGNFGDQELIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAI

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=28858&to=28974) 28858..28974

/gene="ORF10"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=28858&to=28974) 28858..28974

/gene="ORF10"

/codon\_start=1

/product="ORF10 protein"

/protein\_id="[UHS10961.1](https://www.ncbi.nlm.nih.gov/protein/2170881496)"

/translation="MGYINVFAFPFTIYSLLLCRMNSRNYIAQVDVVNFNLT"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=28909&to=28944) 28909..28944

/gene="ORF10"

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

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=28929&to=28957) 28929..28957

/gene="ORF10"

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

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM043984.1?from=29028&to=29068) 29028..29068

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

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240 g

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3421 atcactttct taaagaaaga tgctccatat atagtgggtg atgttgttca agagggtgtt

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