**Severe acute respiratory syndrome coronavirus 2 isolate SARS-CoV-2/human/USA/WA-S16116/2022 ORF1ab polyprotein (ORF1ab), ORF1a polyprotein (ORF1ab), surface glycoprotein (S), ORF3a protein (ORF3a), envelope protein (E), membrane glycoprotein (M), ORF6 protein ...**

GenBank: OM296922.1

[FASTA](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?report=fasta) [Graphics](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?report=graph)

[Go to:](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?expand-gaps=on" \l "goto2180169178_0)

LOCUS OM296922 29767 bp RNA linear VRL 18-JAN-2022

DEFINITION Severe acute respiratory syndrome coronavirus 2 isolate

SARS-CoV-2/human/USA/WA-S16116/2022 ORF1ab polyprotein (ORF1ab),

ORF1a polyprotein (ORF1ab), 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 OM296922

VERSION OM296922.1

DBLINK BioProject: [PRJNA746979](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA746979)

BioSample: [SAMN25071907](https://www.ncbi.nlm.nih.gov/biosample/SAMN25071907)

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 29767)

AUTHORS Nickerson,D.A., Frazar,C.D., Lee,J., Pelle,B., Ryke,E.,

Richardson,M., Adler,A., Brandstetter,E., Han,P.D., Fay,K.,

Ilcisin,M., Lacombe,K., Sibley,T.R., Truong,M., Wolf,C.R.,

Boeckh,M., Englund,J.A., Famulare,M., Lutz,B.R., Rieder,M.J.,

Starita,L.M., Thompson,M., Shendure,J., Bedford,T. and Chu,H.Y.

TITLE Direct Submission

JOURNAL Submitted (18-JAN-2022) The Brotman Baty Institute for Precision

Medicine, Seattle Flu Study submission group, 1959 NE Pacific

Street, Seattle, WA 98195, USA

COMMENT ##Assembly-Data-START##

Assembly Method :: Northwest Genomics Center Viral Pipeline

v. January 2022

Sequencing Technology :: Illumina

##Assembly-Data-END##

FEATURES Location/Qualifiers

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LWLDDVVYCPRHVICTSEDMLNPNYEDLLIRKSNHNFLVQAGNVQLRVIGHSMQNCVL

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FMCVEYCPIFFITGNTLQCIMLVYCFLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVST

QEFRYMNSQGLLPPKNSIDAFKLNIKLLGVGGKPCIKVATVQSKMSDVKCTSVVLLSV

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/gene="ORF1ab"

/product="leader protein"

[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UJE45219.1?from=181&to=818) 789..2702

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[mat\_peptide](https://www.ncbi.nlm.nih.gov/protein/UJE45219.1?from=819&to=2763) 2703..8537

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[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=13450&to=13477) 13450..13477

/gene="ORF1ab"

/note="Coronavirus frameshifting stimulation element

stem-loop 1"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=13462&to=13516) 13462..13516

/gene="ORF1ab"

/note="Coronavirus frameshifting stimulation element

stem-loop 2"

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/gene="S"

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NNCTFEYVSQPFLMDLEGKQGNFKNLREFVFKNIDGYFKIYSKHTPINLGRDLPQGFS

ALEPLVDLPIGINITRFQTLLALHRSYLTPGDSSSGWTAGAAAYYVGYLQPRTFLLKY

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EELDKYFKNHTSPDVDLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYE

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=25358&to=26185) 25358..26185

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=25358&to=26185) 25358..26185

/gene="ORF3a"

/codon\_start=1

/product="ORF3a protein"

/protein\_id="[UJE45221.1](https://www.ncbi.nlm.nih.gov/protein/2180169182)"

/translation="MDLFMRIFTIGTVTLKQGEIKDATPSDFVRATATIPIQASLPFG

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NSVTSSIVITSGDGTTSPISEHDYQIGGYTEKWESGVKDCVVLHSYFTSDYYQLYSTQ

LSTDIGVEHVTFFIYNKIVDEPEEHVQIHTIDGSSGVVNPVMEPIYDEPTTTTSVPL"

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/gene="E"

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/gene="M"

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/gene="ORF6"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=27167&to=27352) 27167..27352

/gene="ORF6"

/codon\_start=1

/product="ORF6 protein"

/protein\_id="[UJE45224.1](https://www.ncbi.nlm.nih.gov/protein/2180169185)"

/translation="MFHLVDFQVTIAEILLIIMRTFKVSIWNLDYIINLIIKNLSKSL

TENKYSQLDEEQPMEIL"

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=27359&to=27724) 27359..27724

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/codon\_start=1

/product="ORF7a protein"

/protein\_id="[UJE45225.1](https://www.ncbi.nlm.nih.gov/protein/2180169186)"

/translation="MKIILFLALITLATCELYHYQECVRGTTVLLKEPCSSGTYEGNS

PFHPLADNKFALTCFSTQFAFACPDGVKHVYQLRARSVSPKLFIRQEEVQELYSPIFL

IVAAIVFITLCFTLKRKTE"

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/gene="ORF7b"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=27721&to=27852) 27721..27852

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/product="ORF7b"

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/gene="ORF8"

[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=27859&to=28224) 27859..28224

/gene="ORF8"

/codon\_start=1

/product="ORF8 protein"

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gap 27880..28202

/estimated\_length=323

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/gene="N"

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/gene="N"

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/translation="MSDNGPQNQRNALRITFGGPSDSTGSNQNGGARSKQRRPQGLPN

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GTTLPKGFYAEGSRGGSQASSRSSSRSRNSSRNSTPGSSKRTSPARMAGNGGDAALAL

LLLDRLNQLESKMSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKAYNVTQAFGRRGP

EQTQGNFGDQELIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAI

KLDDKDPNFKDQVILLNKHIDAYKTFPPTEPKKDKKKKADETQALPQRQKKQQTVTLL

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[gene](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=29514&to=29630) 29514..29630

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[CDS](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=29514&to=29630) 29514..29630

/gene="ORF10"

/codon\_start=1

/product="ORF10 protein"

/protein\_id="[UJE45229.1](https://www.ncbi.nlm.nih.gov/protein/2180169190)"

/translation="MGYINVFAFPFTIYSLLLCRMNSRNYIAQVDVVNFNLT"

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=29565&to=29600) 29565..29600

/gene="ORF10"

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

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=29585&to=29613) 29585..29613

/gene="ORF10"

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

[stem\_loop](https://www.ncbi.nlm.nih.gov/nuccore/OM296922.1?from=29684&to=29698) 29684..29698

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

ORIGIN

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