

Enclosed are human codon optimized, 2xStrep-tagged SARS-CoV-2 plasmids published in the preprint publication Gordon et al 2020 by the Krogan Lab and the QBI-COVID-19 Research Group (QCRG).

<https://www.biorxiv.org/content/10.1101/2020.03.22.002386v2>

2 uL of dilute DNA was aliquoted into each well and dried down. We suggest adding 5 uL of water or EB per well, incubating at room temperature, and mixing to resuspend. Please transform into E.coli that tolerate repetitive sequences, such as Stellar or NEB Stable cells. Grow at 30 degrees Celsius in ampicillin, and for large DNA preps we suggest at least 250 mL cultures grown for 26-28 hours. We have requested that biorxiv upload all of our plasmid sequences to be available with the manuscript.

Email [david.gordon@ucsf.edu](mailto:david.gordon@ucsf.edu) if you experience any issues transforming these clones.

### Sequencing Primers

Primers used for pLVX-EF1alpha-IRES-Puro backbone sequencing

pLVX-EF1alpha-Fwd	TTGGATCTTGGTTCATTCTC	Forward Sequencing primer for pLVX-EF1alpha-IRES-Puro vector
pLVX-EF1alpha-Rev	AATAACATATAGACAAACGC	Reverse Sequencing primer for pLVX-EF1alpha-IRES-Puro vector  <i>*Does not work on S protein cloned into pTwist EF1alpha vector.</i>

### Construct List

96-well Coordinates	Viral Protein / ORF	Construct Name
A01	SARS-CoV-2-nsp1	pLVX-EF1alpha-SARS-CoV-2-nsp1-2xStrep-IRES-Puro
A02	SARS-CoV-2-nsp2	pLVX-EF1alpha-SARS-CoV-2-nsp2-2xStrep-IRES-Puro
A03	SARS-CoV-2-nsp3	<b>*In production</b>
A04	SARS-CoV-2-nsp3-C857A	<b>*In production</b>
A05	SARS-CoV-2-nsp4	pLVX-EF1alpha-SARS-CoV-2-nsp4-2xStrep-IRES-Puro
A06	SARS-CoV-2-nsp5	pLVX-EF1alpha-SARS-CoV-2-nsp5-2xStrep-IRES-Puro
A07	SARS-CoV-2-nsp5-C145A	pLVX-EF1alpha-SARS-CoV-2-nsp5-C145A-2xStrep-IRES-Puro

A08	SARS-CoV-2-nsp6	pLVX-EF1alpha-SARS-CoV-2-nsp6-2xStrep-IRES-Puro
A09	SARS-CoV-2-nsp7	pLVX-EF1alpha-SARS-CoV-2-nsp7-2xStrep-IRES-Puro
A10	SARS-CoV-2-nsp8	pLVX-EF1alpha-SARS-CoV-2-nsp8-2xStrep-IRES-Puro
A11	SARS-CoV-2-nsp9	pLVX-EF1alpha-SARS-CoV-2-nsp9-2xStrep-IRES-Puro
A12	SARS-CoV-2-nsp10	pLVX-EF1alpha-SARS-CoV-2-nsp10-2xStrep-IRES-Puro
B01	SARS-CoV-2-nsp11	pLVX-EF1alpha-SARS-CoV-2-nsp11-2xStrep-IRES-Puro
B02	SARS-CoV-2-nsp12	pLVX-EF1alpha-SARS-CoV-2-nsp12-2xStrep-IRES-Puro
B03	SARS-CoV-2-nsp13	pLVX-EF1alpha-SARS-CoV-2-nsp13-2xStrep-IRES-Puro
B04	SARS-CoV-2-nsp14	pLVX-EF1alpha-2xStrep-SARS-CoV-2-nsp14-IRES-Puro
B05	SARS-CoV-2-nsp15	pLVX-EF1alpha-SARS-CoV-2-nsp15-2xStrep-IRES-Puro.dna
B06	SARS-CoV-2-nsp16	<b>*In production</b>
B07	SARS-CoV-2-S	pTwist-EF1alpha-SARS-CoV-2-S-2xStrep
B08	SARS-CoV-2-orf3a	pLVX-EF1alpha-SARS-CoV-2-orf3a-2xStrep-IRES-Puro
B09	SARS-CoV-2-orf3b	pLVX-EF1alpha-2xStrep-SARS-CoV-2-orf3b-IRES-Puro
B10	SARS-CoV-2-E	pLVX-EF1alpha-SARS-CoV-2-E-2xStrep-IRES-Puro
B11	SARS-CoV-2-M	pLVX-EF1alpha-SARS-CoV-2-M-2xStrep-IRES-Puro
B12	SARS-CoV-2-orf6	pLVX-EF1alpha-SARS-CoV-2-orf6-2xStrep-IRES-Puro
C01	SARS-CoV-2-orf7a	pLVX-EF1alpha-SARS-CoV-2-orf7a-2xStrep-IRES-Puro
C02	SARS-CoV-2-orf7b	pLVX-EF1alpha-2xStrep-SARS-CoV-2-orf7b-IRES-Puro
C03	SARS-CoV-2-orf8	pLVX-EF1alpha-SARS-CoV-2-orf8-2xStrep-IRES-Puro
C04	SARS-CoV-2-N	pLVX-EF1alpha-SARS-CoV-2-N-2xStrep-IRES-Puro
C05	SARS-CoV-2-orf9b	pLVX-EF1alpha-SARS-CoV-2-orf9b-2xStrep-IRES-Puro
C06	SARS-CoV-2-orf9c	pLVX-EF1alpha-2xStrep-SARS-CoV-2-orf9c-IRES-Puro
C07	SARS-CoV-2-orf10	pLVX-EF1alpha-SARS-CoV-2-orf10-2xStrep-IRES-Puro
C08		pLVX-EF1alpha-eGFP-2xStrep-IRES-Puro

\* nsp3, nsp3 (C857A) and nsp16: in production. Please contact us as these will be ready soon.