

Station C: SLP-007 (3 Reagents) for Primer Addition for COVID-19

Setup guide

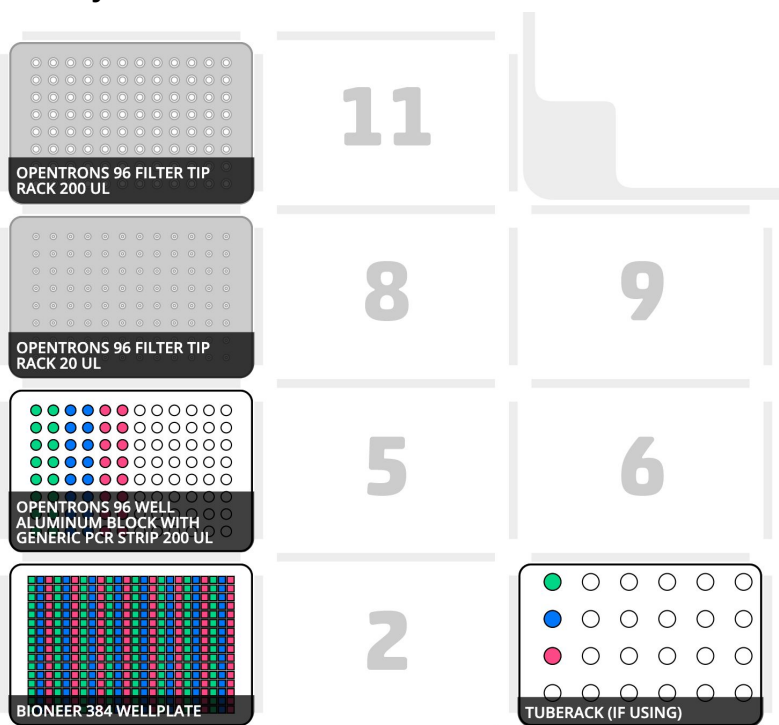
Code parameters:

- Tip tracking (line 12) - if set to 'True', protocol will save the state of the tips after each run and will prompt user to replace tips when tips run out.
- Rack definition (line 13) - define the labware that will be used to hold the tubes of N1 and N2, if automating transfer to PCR strips
- Pipette controls (line 14) - if set to 'True', protocol will pipette 35µL of primers to PCR strip from tube rack (as defined in line 13)

Pipettes:

- P20 Multi-Channel Pipette on the left mount
- P300 Single-Channel Pipette on the right mount, if doing optional step

Deck Layout:



Labware and module requirements:

- 1 x Bioneer 384-well plate
- 1 x Opentrons 96-well aluminum block
- 6 x PCR strips
- 1 x Opentrons 20µL Filter Tipracks
- 1 x Opentrons 200µL Filter Tipracks
- 1 x Opentrons 24-well Tuberack, optional

Slot 4, Opentrons Aluminum Block + PCR Tubes -

Column 1: N1, 35µL

Column 2: N1, 35µL

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Column 3: N2, 35µL

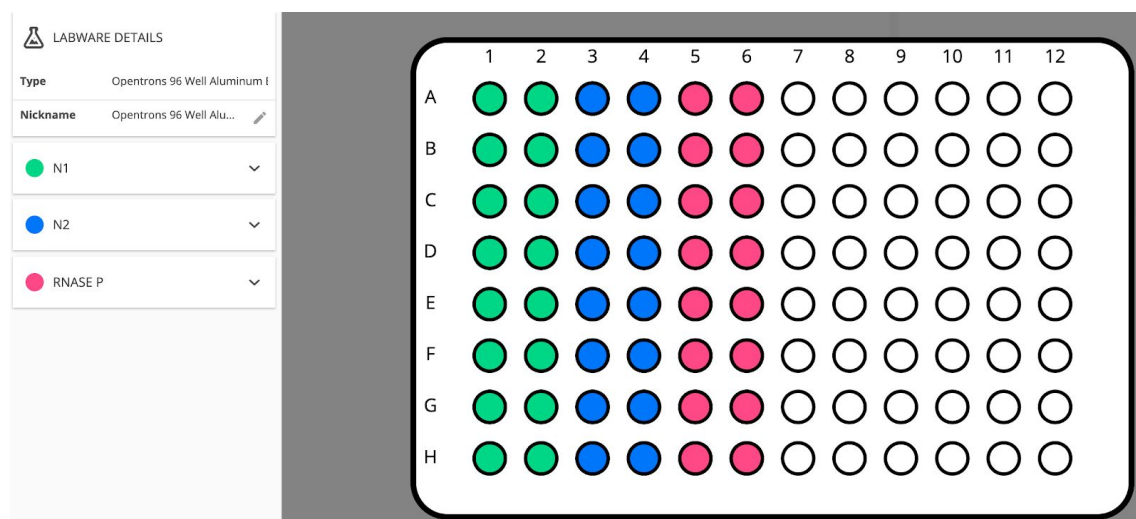
Column 4: N2, 35µL

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Column 5: RNaseP, 35µL

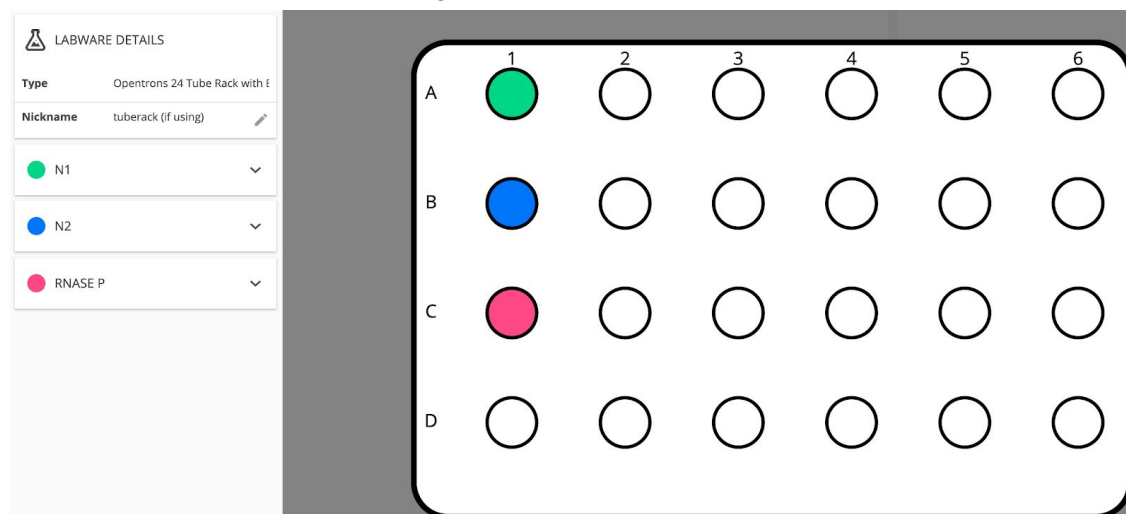
Column 6: RNaseP, 35µL

***Note:** If **PIP_CTRL** is set to **True** (line 14), the P300 Single-Channel Pipette will transfer 35µL from the Opentrons Tuberack to each corresponding well in empty PCR strips. Otherwise, the primer/probes should be manually transferred to PCR strips and loaded into the aluminum block.



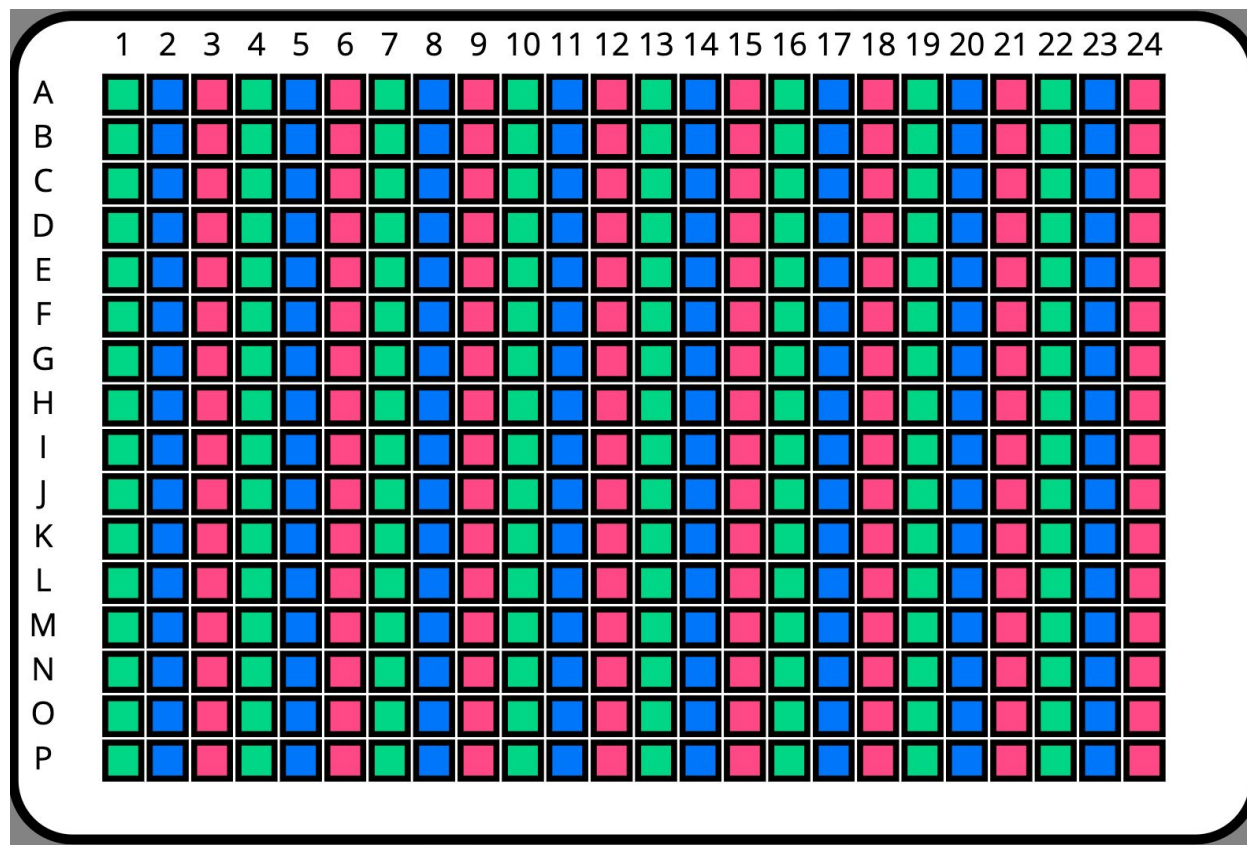
Slot 3, Opentrons Tuberack, *optional* -

If using, load position A1 with a tube containing N1 (600µL), position B1 with a tube containing N2 (600µL), and a tube containing RNaseP (600µL) in position C1.



Slot 1, Bioneer 384-well Plate (Final output) -

Schematic of plate layout at end of protocol; protocol will add 2 μ L of N1 (noted by green), 2 μ L of N2 (noted by blue), and 2 μ L of RNaseP (noted by red) to the corresponding wells.



Before you begin:

1. Add PCR strips to the aluminum block with N1/N2/RNaseP (or change line 14 to `True` to automate the transfer of N1/N2/RNaseP to PCR strips).
2. Calibrate pipette and labware.