Station B: NukEx Mag RNA/DNA - Gerbion

Code parameters:

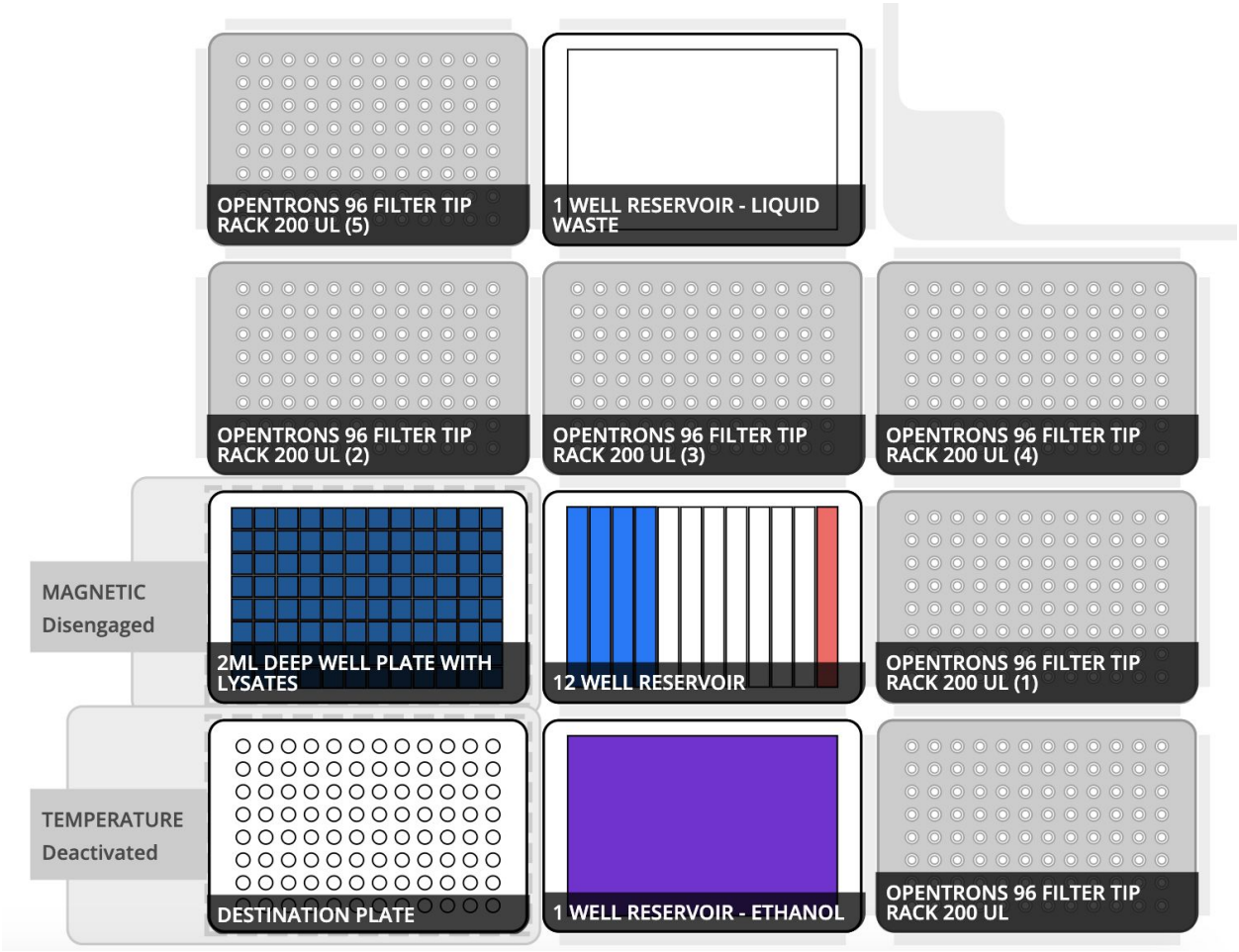
- Change the sample number on line 14 (default is 8, max is 94)
- Change the elution volume on line 15 (default is 100µl)
- Change the starting volume on line 16 (default is 800µl)
- Change tiprack tracking to True or Fale on line 17 (default is False)
- Make “tiprack parking” True or False on line 18 (default is True)

**if you selected True for “tiprack parking,” tips used for the same buffers with the same samples will be reused where 1 tiprack turns into a tiprack where used tips are “parked”. This method has low risk of contamination and is highly recommended to avoid pauses to reuse tips.*

Pipettes:

- P300 multichannel on the left mount

Deck layout:



Labware and module requirements:

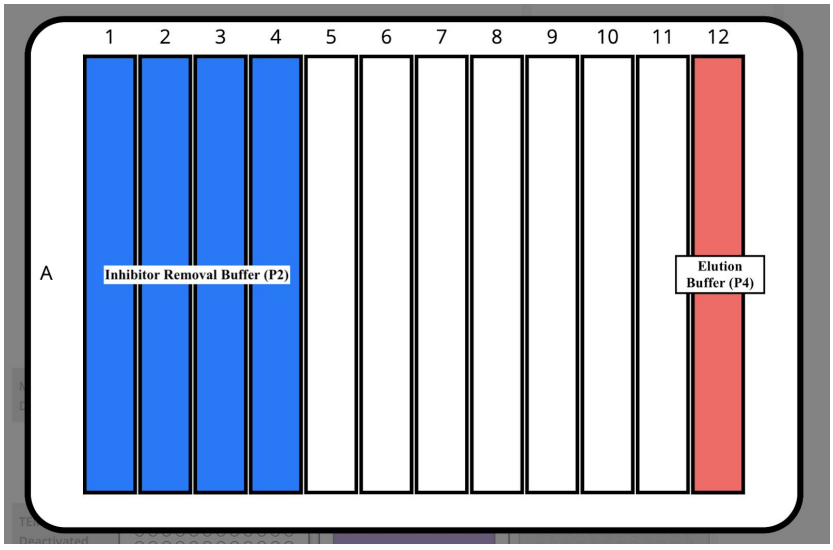
- 1 x magnetic module

- 1 x temperature module
- 1 x 2mL deep well plate **[input with lysates]**
- 6 x 200µl filter tip racks (10 x 200µl if you select false for tiprack parking)
- 2 x 1 well reservoir **[1 with wash buffer in slot 2, 1 loaded empty for the liquid waste in slot 11]**
- 1 x 12 well reservoir with reagents **[Inhibitor Removal Buffer and elution buffer]**
- 1 x 96 well aluminum block loaded on top of the temperature module in slot 1
- 1 x 96 well PCR plate or PCR strip tubes to match the number of samples **[output with eluates/extractions]**

Volume requirements:
***Note**: the below volumes account for a 10% overage - the dead volume can be adjusted depending on the calibration of the pipette to the labware, but it is recommended to have an overage of at least 10%*

Reagents	**Volume per sample (µl)**	**Volume for 8 samples (µL)**	**Volume for 48 samples (mL)**	**Volume for 96 samples (mL)**
Inhibitor Removal Buffer (P2)	500	6,000	26	50
Wash buffer (P3)	900	10,800	46.8	90
Elution buffer (P4)	100	1,200	5.2	10

Slot 5 - 12 well reservoir



Before you begin:

1. Pre-cool the Temperature Module in the Opentrons App to 4°C
2. Add the Inhibitor Removal Buffer and Elution Buffer to the 12 well reservoir
3. Add the Wash buffer to the 1 well reservoir
4. Place the deep well plate of lysates from Station A to on top of the magnetic module in slot 4.
5. Add a 96 well aluminum block and the 96 well PCR plate or PCR strip tubes on top of the temperature module

When the liquid waste reservoir in slot 11 is full, the robot will pause for the user to empty the liquid. After the waste has been emptied and put back in the slot, press “resume” on the app to finish running the protocol.

The final plate of eluates/extractions will be found on top of the temperature module in slot 1. Once the run is complete, please proceed to Station C for RT-qPCR set up.