

STATION B

RNA Extraction: 96 deep-well plates containing samples are moved to the second robot for RNA extraction using magnetic microbeads. This is the bulk of the automated process due to the many wash steps required to fully purify the RNA.

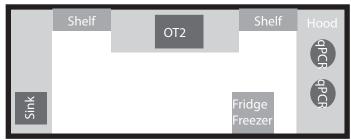
TASK:
What is the protocol?
Step per step
What consumables and are needed
for each step?

STATION A

Sample Plating: 96 collection tubes with patient samples suspended in deactivation buffer are put on the first Opentrons robot to be reformatted for RNA extraction. The robot pipettes samples and positive controls from tubes into the deep-well plate.

TASK:

What is the protocol?
Step per step
What consumables and are needed
for each step?



STATION C

RAssay Setup: The RNA isolated from the samples (elution) is then moved to a third room that houses the qPCR instrument and is designed to be as "clean" as possible to minimize contamination. The plate with pure sample RNA is placed onto an Opentrons robot to be prepped for the RT-qPCR assay.

TASK:

What is the protocol? Step per step What consumables and are needed for each step?