Plasmid purification using the Opentrons OT-2

1) Prepare a 2 ml deep well plate with square wells for cultivation
    a. Sterilize the plate (autoclave or UV light)
    b. Fill each well with 1.5 ml LB, add antibiotic if necessary
2) Pick colonies for cultivation

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D												
E												
F												
G												
H												

3) Seal the plate with non-woven sealing foil and incubate overnight (16 h) at 37 °C, 250 rpm and 25 mm shaking diameter.
4) Harvest the cultures by centrifuging at 1500 x g for 15 min.
5) Load the protocol “plasmid_purification”, set up the deck according to instructions in the app and calibrate the robot. You will need:
    a. The 300 µl Opentrons multichannel pipette (GEN 1)
    b. 11x 300µl tip boxes
    c. 3x round-bottom collection plates
    d. 1x DWP containing pelleted cells
    e. 1x 12-column plate filled with reagents:

Column	Reagent	min. volume for one column [ml] (recommended volume)	min. volume for one plate [ml] (recommended volume)
1	Cell resuspension solution	0.72 (2.0)	8.64 (12.0)
2	Cell lysis solution	0.96 (2.0)	11.52 (14.0)
3	Neutralisation solution	0.96 (2.0)	11.52 (14.0)
4	Magnesil Blue	0.20 (2.0)	2.40 (5.0)
5	Magnesil Red	0.40 (2.0)	4.80 (7.0)
6	80 % (v/v) Ethanol	0.80 (2.0)	9.60 (13.0)
7	80 % (v/v) Ethanol	0.80 (2.0)	9.60 (13.0)
8	80 % (v/v) Ethanol	0.80 (2.0)	9.60 (13.0)
9	Elution Buffer	0.80 (2.0)	9.60 (13.0)
10	-	-	-
11	-	-	-
12	-	-	-

6) Start the protocol.
    a. While the protocol is running, you should watch the trash bin. If it becomes too full, please empty it.
    b. After approx. 1 h you are required to exchange the collection plates and to fill up the tip boxes. Press resume afterwards.
    c. After approx. 1:45 h, the robot stops until you confirm that the pellets in the plate on the Magnetic Module are dry. The drying process can take up to 1 h. To accelerate it, you can place the plate under a sterile hood or in a drying oven. Dried pellets are lighter in colour and have a matt finish.
7) After completion of the protocol, the purified plasmid DNA is in the plate at position 2. Seal it with adhesive foil and store it at -20 °C until use.