

E. coli Transformation in OT-2

Quick Overview

Add DNA into competent cells in thermocycler.

Incubate the cells at 4 °C for 20 minutes.

Heat-shock the cells at 42 °C for 30 seconds.

Incubate the cells at 4 °C for 2 minutes.

Add the recovery medium and incubate cells at 37 °C for 60 minutes.

Preparation

Prepare the reagents and labware according to the below diagrams.

Volumes (uL) indicate how much of reagents will be used, so add additional volume.

Armadillo 96 Well Plate 200 µL PCR Full Skirt in slot 1

	1	2	3	4	5	6	7	8	9	10	11	12
A	3	30	150									
B	3	30	150									
C	3	30	150									
D	3	30	150									
E	3	30	150									
F	3	30	150									
G	3	30	150									
H	3	30	150									

water BL21(DE3) SOC pUC19 pJKR

Armadillo 96 Well Plate 200 µL PCR Full Skirt in slot thermocycler

	1	2	3	4	5	6	7	8	9	10	11	12
A	183											
B	183											
C	183											
D	183											
E	183											
F	183											
G	183											
H	183											

water/BL21(DE3)/SOC pUC19/BL21(DE3)/SOC pJKR/BL21(DE3)/SOC

Deck Loading Instructions

Check that p20_multi_gen2 is in the right mount, and p300_multi_gen2 is in the left mount.

Slot 2, 3 : load opentrons_96_tiprack_20ul for the p20_multi_gen2 pipette.

Slot 6, 9 : load opentrons_96_tiprack_300ul for the p300_multi_gen2 pipette.

Slot 1 : load armadillo_96_wellplate_200ul_pcr_full_skirt containing DNA.

Slot 1 : load armadillo_96_wellplate_200ul_pcr_full_skirt containing cells.

Slot 1 : load armadillo_96_wellplate_200ul_pcr_full_skirt containing SOC.

Slot 7,8,10,11: load a thermocycler and turn it on.

Thermocycler: load armadillo_96_wellplate_200ul_pcr_full_skirt when instructed on the screen.