Aug 20, 2020

Bacterial Transformation - Mix & Go Competent Cells - CHEM 584

Ken Christensen[1]
[1]Brigham Young University

In Development dx.doi.org/10.17504/protocols.io.bj2tkqen

Ken Christensen
Brigham Young University

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Adapted from
https://files.zymoresearch.com/protocols/_t3001_t3002_mix_go_e._coli_transformation_kit_buffer_set.pdf

DOI

dx.doi.org/10.17504/protocols.io.bj2tkqen

PROTOCOL CITATION

Ken Christensen 2020. Bacterial Transformation - Mix & Go Competent Cells - CHEM 584 . **protocols.io** https://dx.doi.org/10.17504/protocols.io.bj2tkqen

MANUSCRIPT CITATION please remember to cite the following publication along with this protocol

Adapted from
https://files.zymoresearch.com/protocols/_t3001_t3002_mix_go_e._coli_transformation_kit_buffer_set.pdf

CREATED

Aug 20, 2020

LAST MODIFIED

Aug 20, 2020

PROTOCOL INTEGER ID

40755

SAFETY WARNINGS

You should follow standard BSL-1 procedures when using this protocol.

BEFORE STARTING

Get an aliquot of the Mix & Go competent cells from the -80 Freezer (ask a TA to get them for you)

1 Prewarm culture plates in a **37 °C** incubator for **00:30:00** .

2 Add **1 µl** to **5 µl** plasmid DNA to a **50 µl** aliqanuot of thawed competent cells (Mix & Go) on ice, mix gently for a few seconds (try to keep the added volume of DNA less than 5% of the total). Place tube on ice for **00:05:00**

minutes.

When selecting with Kanamycin, Tetracycline, etc., an outgrowth performed in SOC medium is required for efficient transformation. After the transformation mixture has incubated on ice for at least 5 min, add 4 volumes of SOC (e.g., 400 µl of SOC to 100 µl of the transformation mixture) and incubate for 1 hour at 37°C with gentle shaking at 200-300 rpm.

3 Spread **50 µl** to **100 µl** of the mixture onto a pre-warmed (37°C) LB plate containing Ampicillin (or other selection antibiotic).

Using chilled LB plates will decrease the transformation efficiency.

4 Incubate overnight at **37 °C** in the bacterial incubator.

You can also incubate on the bench or in a drawer at room temperature for a longer time if this is convenient for scheduling. For example, leaving a plate on the bench for 2-3 days at room temperature usually generates nice sized colonies and you avoid having to come into the lab the next day (e.g., over the weekend).

Citation: Ken Christensen (08/20/2020). Bacterial Transformation - Mix & Go Competent Cells - CHEM 584 . https://dx.doi.org/10.17504/protocols.io.bj2tkqen