

Sep 22, 2019 Version 1

Mix and go competent cells V.1

DOI

dx.doi.org/10.17504/protocols.io.7jmhkk6

Ben Kuipers¹

¹Wageningen University

iGEM Wageningen 2019



Ben Kuipers

OPEN  ACCESS



DOI: dx.doi.org/10.17504/protocols.io.7jmhkk6

Protocol Citation: Ben Kuipers 2019. Mix and go competent cells. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.7jmhkk6>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: September 22, 2019

Last Modified: September 22, 2019

Protocol Integer ID: 27981

Abstract

Mix and Go protocol for the preparation of competent E. coli cells

Attachments



MixANDGo.pdf

741KB

- 1 Use 0.5 ml of fresh, overnight E. coli culture grown in LB to inoculate 50 ml ZymoBroth™ or SOB medium in a 500 ml culture flask. Shake culture vigorously (150 - 250 rpm) at the appropriate temperature* until the OD600nm is 0.4 - 0.6. (Buffer Preparation Prior to Harvesting the Cells: The Wash and Competent Buffers are provided as 2X stock solutions. They need to be diluted to 1X by adding an equal amount of Dilution Buffer. To prepare 5 ml of 1X Wash Buffer: Add 2.5 ml Dilution Buffer and 2.5 ml of 2X Stock Wash Buffer. To prepare 5 ml of 1X Competent Buffer: Add 2.5 ml Dilution Buffer and 2.5 ml of 2X Stock Competent Buffer. Please keep these freshly prepared 1X Buffers ice cold. These 1X Buffers are good for 2 days at 0-25°C. It is important that each step of the following procedure should be done on ice or at 0-4°C.)
- 2 Transfer the culture from Step 1 to ice. After 10 minutes, pellet the cells by centrifugation at 3,000 - 3,700 rpm (i.e., 1,600 - 2,500 x g) for 10 minutes at 0 - 4°C.
- 3 Remove the supernatant and resuspend the cells gently in 5 ml ice-cold 1X Wash Buffer. Re-pellet the cells as in Step 2.
- 4 Completely remove the supernatant and gently resuspend the cells in 5 ml ice-cold 1X Competent Buffer.
- 5 Aliquot (on ice) 0.1-0.2 ml of the cell suspension into sterile microcentrifuge tubes. Cells are now ready for transformation with DNA or can be stored below -70°C for transformation at a later time.