

## Transformation into BL21-Codon Plus-RP Competent Cells

Tuesday, 7/15/03

- two "shots" (100  $\mu$ L each) of cells were thawed on ice. Two Falcon 15-ml 2059 polypropylene tubes were cooled on ice.
- The cells were mixed and 100  $\mu$ L were transferred to each tube. (1 for PAX transformation and 1 for the control)
- 2.0  $\mu$ L of a 1/10 dilution of the stratagene-provided  $\beta$ -mercapto-ethanol mix was added to each 100- $\mu$ L aliquot. The contents were swirled, then incubated on ice 10 min, gently swirling every 2 min.
- 1  $\mu$ L of the control pUC18 plasmid was added to 1 tube and 2  $\mu$ L of miniprep #2 (from p. 3-152) was added to the other tube (1-50 ng of expression plasmid DNA is recommended for the transformation) and each tube was gently swirled, then incubated on ice for 30 min. SOC medium was preheated to 42°C.
- Each transformation reaction was heat-pulsed for exactly 20 seconds at 42°C in a water bath, then immediately placed on ice for 2 min.
- 0.9 mL of 42°C-preheated SOC medium was added to each tube and the reactions were incubated in a 37°C shaker for 1 hr (actually 2 hrs).
- 100  $\mu$ L of each reaction were spread onto LB plates containing both carbanecillin and chloramphenicol. The plates were incubated overnight at 37°C. (Procedure based on Stratagene BL-21 Codon Plus Instruction Manual.)

Wednesday 7/16/03

- Tons of colonies grew up on the plate containing the expression plasmid DNA (pGex-4T-2) containing the modified PAX insert. 50 (rather than 100)  $\mu$ L would have been more than enough cell culture to have spread on the LB plate. The control plate grew up a decent amount of colonies.
- 6 colonies were selected and grown up in 2 mL of LB with carbanecillin and chloramphenicol overnight shaking at 37°C.