

4/11/03

Yeast Transformation (long)

- 1) Set up 5ml overnight culture in YPD/YPG
- 2) Transfer 0.5 ml of overnight to fresh 25 or 50 ml culture. (0.1 - 0.3 starting)
Let grow 3-5 hours \rightarrow till log phase \rightarrow OD₆₆₀ between 0.3 + 0.8
2-3 cell div. \rightarrow higher is better.
- 3) Transfer 25/50 ml culture to sterile orange-capped tube.
- 4) Spin 5 min @ speed 7.
- 5) Decant supernatant, resuspend in \bullet TE/Li acetate (5ml). Respin.
5a) non-specific DNA boiling 5min \rightarrow ice 5min \rightarrow 5 min @ speed 1
- 6) Decant liquid twice. Resuspend pellet w/ remaining liquid.
 \rightarrow 25 ml culture \rightarrow 125 ml \pm 50 ml
 \rightarrow 50 ml culture \rightarrow 250 ml \pm 50 ml
- (optional) 7) Transfer 50 μ l of cell suspension to 1.7 ml epi.
 \rightarrow (per reaction) \rightarrow ice 15 mins
- 8) For each reaction add 5 μ l of nonspecific DNA (salmon sperm DNA) and 5 μ l transforming DNA (not to mock though) 1 μ l if it is a CEN plasmid!
- 9) Add 250 μ l TE/lithium acetate/PEG to tube and resuspend gently (invert).
- 10) Incubate in 32°C shaker for 30 mins.
- 11) Transfer to 42-44°C water bath for 15 mins (Elaine's bench).
- 12) Pellet cells in microfuge 1 min @ speed 10.
- 13) Aspirate media from pellet. Add 250 μ l 1M sorbitol, resuspend.
- 14) Transfer entire mixture to selective media plate. \rightarrow Incubate in 32°C room.

* For 6418, etc. plates, after step 12, place pellet in 1ml nonselective media (YPD, YPG), place test tube in rotating wheel in 25°C room for ~~18~~ 18 hours. ~~Then~~ plate. Spin down 1 min @ speed 10, ~~then~~ resuspend in 250 μ l sorbitol, plate.
 \downarrow aspirate supernatant

nb