

BULK SEGREGANT PROTOCOL

Grow 10mL YPD overnight

Spin down and resuspend in 20mL SPO++ until ~75% sporulation efficiency is reached

Spin down and resuspend in 200 λ H₂O (Final volume ~500-750 λ)

Add 5 λ zymolyase (1,000x, 150 mg/mL)

** Note tetrad prevalence after each of the following steps**

Incubate at 30°C for 1hr

Add 50 λ glass beads and 50 λ 10% Triton

Vortex for 2mins

Incubate at 30°C for 40mins

Vortex for 2mins

Bring up to 5mL with H₂O (~4-4.5mL H₂O needed)

Sonicate at power 4 for 4secs

Start two 5mL YPD holds (500 λ sample into 5mL YPD)

After 24hrs plate 4 BSM plates: two 2mL (BSP's) and two 1mL (BSI's)

Grow for ~3 days and pick two 96well plates of singles from the 1mL plates and pool the 2mL plates:

Spread 5mL YPD (collected volume ~2-3mL)

Spread 2.5mL YPD (additional collected volume ~1-2mL)

End volume ~4mL

Add 1mL 75% Glycerol

Freeze down in single row of 96well BSP plate and 1mL in cryo tube

BULK SEGREGANT MEDIA (BSM)

500mL SD agar

Add 0.4g CSM –arg and 0.5g 5FOA before autoclaving

Add 500 λ ClonNat (100mg/mL) and 500 λ CAN (60mg/mL) to melted agar

YIELD: ~7-8 Big plates