Aspergillus fumigatus Colony PCR Protocol

- 1. Harvest a small amount of spores in sterile water
 - a. Generally, take 25 ul of sterile water in a 1.5 ml tube and scrape a small spot from a sporulating AF plate with a 1 ml pipet tip. Two scrapes seem to be plenty.
 - b. Mix tip with spores in the 1.5 ml tube of water using end of pipette tip. The water should visibly have spores but NOT be a dark color or overloaded with spores, a nice light green is perfect
- 2. Centrifuge at max speed for 5 minutes. You should see the spores in a nice pellet the size of a pin head or two. Remove supernatant by pipetting, make sure you discard supernatant in ROCCAL.
- 3. Place the tube of spores (you can put the rack in also) in the microwave and heat on full power for 6 minutes (also place a 500 ml beaker of water to prevent damage to the microwave).
- 4. Immediately add 40 ul of 1 X TE buffer (pH 8.0) to each tube of spores and vortex vigorously. You can also use EB. Place Immediately on ICE.
- 5. Then centrifuge at max speed, 13,000 RPM, for 3 minutes. This is your DNA template.
- 6. Use 5 ul of the DNA template in the PCR reaction. You usually want to also run Beta Tubulin primers, or a primer pair with an amplicon of about the same size as your target amplicon, for each sample as a positive control to confirm that you have PCR quality DNA.
- **This protocol works 90% of the time. For some reason, sometimes it does not work, but is a good quick screen for transformants. Results should always be confirmed with PCR from a good DNA extraction and Southern blot. I've found it works best with products < 2 kb.

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