

ION AGAR ELECTROPHORESIS

Slides

0.1% Ion Agar slides (See Ouchterlony procedure for details).
Punch holes in agar using 15 gauge needle and template.

Setting up Tank

1. Fill tanks with 0.05M. Barbitol Buffer pH 8.2; or if already filled, tip tanks from right to left to mix buffer; then level buffer in each side.
2. Turn on voltmeter; set at + DC volts, 150 volts; zero.
3. Remove top, placing lid on inner lock.
4. Keep regulation on current. Turn rheostat to zero. If using 1 slide, set ma to low; for 2 or more slides, set on high. Always keep voltage on low.
5. Place slide on tray, agar side up, place wicks (wet) on the slide and in the buffer.

Running

- *6. Turn on power supply. Touch electrodes to middle of each slide, dial up rheostat to get ~40 volts across each slide.
7. Turn off power; turn rheostat back to zero, taking note of the setting required.
8. Put lid on; turn on power, turn rheostat to required setting.
9. Put "DANGER" sign on tray.
10. Run ~70 minutes
11. Turn power off; return rheostat to zero.
12. Stain slide directly in Buffalo Black. ~3 minutes
13. Rinse to get bubbles out; wrap in wet bibulous paper and dry.
14. Dry for 2 hours.
15. Take paper off and (destain in 5% Acetic acid. if necessary)

*NOTE: For a quick and dirty run, this step may be eliminated and rheostat set to obtain ~20 ma per slide.