

## Using the microfluidizer to homogenize

1. 15 mins before starting, turn on the circulating chilling bath. Make sure that the play button is pressed. Use the arrow keys to navigate to the play button if it is not selected when the machine starts
2. Set the temperature – should be already set to 10°C. The machine can't cool below 10°C, so leave it at 10°C.
3. Turn on the homogenizing microfluidizer:
  - a. Turning red switch on the back of the machine down
  - b. Turn on air pressure knob
4. Unscrew reservoir (should be partially filled with 50% isopropyl and water)
5. Release the emergency stop knob by turning it 30 degrees
6. Press start to flush whole system
7. Turn the gray air regular knob to get the pressure to 20 kpsi (don't go above 20kpsi for bacteria) note: watch and control pressure.
8. When level of isopropyl is low, add distilled water.
9. After what is mostly flushed, prime with buffer
10. After buffer add bacteria
11. Pass through twice. The lysate will ultimately be diluted 1.5 or 2x with buffer at the end.
12. To clean homogenizer after use Add buffer to wash remaining lysate
13. Add water and continue to flush
14. Add isopropanol and leave about 20mL in the machine.
15. Log use with book atop machine.

