

Producing SE85 droplets

Materials

- Xdrop® or Xdrop Sort
- Xdrop SE85 Cartridge
- Xdrop SE85 Holder
- Xdrop SE Gasket
- Droplet Oil (SE) ●
- Sample mix (e.g., SE MDA mix ●, SE MDA enzyme O, and DNA)

Method

1. Prepare the sample mix as described in the Xdrop and Xdrop Sort Manuals.
2. Unpack the cartridge and cartridge holder. Place the cartridge in the holder.
3. Using a wide-bore P200 pipette tip (outer diameter: 1–1.9 mm), collect **20 µl** of your sample.
4. Load the lanes to be used:

- I. Place the pipette tip vertically in the inlet hole at the bottom of the inlet well. Ensure there is a tight connection
- II. Push the plunger until you reach the first stop position
- III. Hold the plunger in position for 15 s, maintaining the tight connection
- IV. Remove the pipette while holding the plunger in place

5. Add **75 µl** Droplet Oil (SE) ● to the side of the inlet well.

6. Place the white Xdrop SE85 Gasket onto the cartridge.

7. Push the Start button at the front of the Xdrop instrument and press [Open](#).

8. Position the cartridge in its holder in the instrument drawer and press [Close](#) → [Next](#) → [SE](#).

9. Select the lanes to be used (the green color indicates that the lane is selected) and press [Run](#).

10. When the message “Your droplets are ready” is shown, press [Finish](#) → [Open](#).

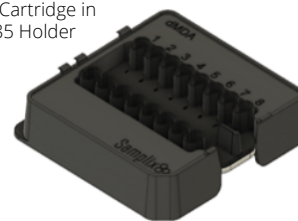
11. Remove the cartridge from the instrument, press [Close](#) and push the Start button to power down.

12. Collect them by slowly pipetting from the sides towards the center of the well. The total volume of single-emulsion droplets and oil in each collection well should be 70–100 µl.

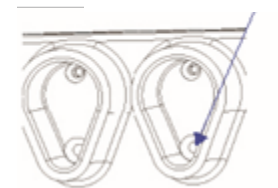
13. Inspect the volume of collected droplets before removing the oil. The droplet layer is on top of the oil phase and should be approximately 2–3 mm thick. Remove all but 1–2 mm of oil from the bottom of the collection tube.

Please refer to the Xdrop Manual or Xdrop Sort Manual for more information.

Xdrop SE85 Cartridge in
Xdrop SE85 Holder



Load sample mix here



Before pipetting, ensure that the tip is vertical and fits tightly in the inlet hole

