

Instructions for CellRaft™ single-cell isolation

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We offer single-cell isolation using CellRaft™ (<https://cellmicrosystems.com/cellraft-technology/>). Typically, we isolate 50 to 100 cells for each batch.

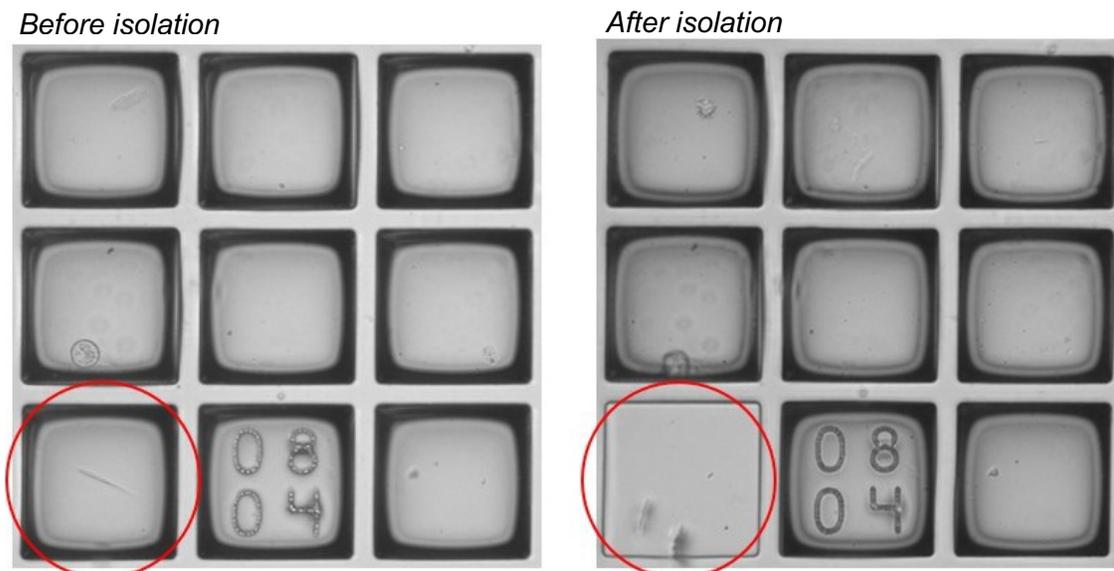


Fig. Isolating a single fibroblast using CellRaft™. Image was taken under a microscope. **Left panel:** The raft left of number “0804” contains one single fibroblast (red circle). **Right panel:** The target raft containing the single cell next to “0804” was collected into a PCR tube using a collection wand. This left the well empty (red circle). The two scratches in the target raft are caused by a needle of a release device, a part of the CellRaft™ system. The needle was used to dislodge the raft containing the cell from the CellRaft™ array. This system essentially precludes the capture of more than one cell. (Image from Dong et al. Nature Methods 2017)

Sample requirement

1. Frozen cells of single populations.
2. Cells can be generated to a single-cell suspension after recovered.
3. We recommend freezing $>1 \times 10^6$ cells in 1 ml of freezing media per cryotube. Contact us if you have a smaller number.
4. If the number of cells is not a limiting factor, freeze 2×10^6 cells in 1 ml of freezing media per cryotube and prepare two (2) cryotubes per sample.
5. Use standard freezing media (e.g. cell growth media + 20% FBS + 10% DMSO; or 90% FBS + 10% DMSO) and place the samples at -80°C while slowly decreasing the temperature using any device/method to maintain an approximate $-1^\circ\text{C}/\text{minute}$ freeze rate.

Information required (before submitting your samples)

1. Tell us more about your cells (e.g. adherent or suspension, can cells be cultured in standard tissue dish?)
2. Cell culture medium (DMEM, EMEM, RPMI 1640 or FBS. If others, please contact us in advance).

For further assistance, please contact support@singulomics.com.