**Supplementary file 1. Source data for the calculation of sample retention efficiency shown in Figure 1d**

The data here is shown as % sample retention for each step per 96-well plate, each value in the tables below represents one individual plate.

**Step 1 – Sample retention after 30 days of automated culture**

|  |  |  |
| --- | --- | --- |
| 100.00% | 100.00% | 100.00% |
| 98.96% | 98.96% | 100.00% |
| 100.00% | 100.00% | 100.00% |
| 98.96% | 100.00% | 100.00% |
| 100.00% | 100.00% | 97.92% |
| 100.00% | 100.00% | 100.00% |
| 100.00% | 98.96% | 100.00% |
| 100.00% | 100.00% | 100.00% |
| 97.92% | 100.00% | 100.00% |
| 100.00% | 100.00% | 97.92% |

**Step 2 – Efficiency of the automated transfer from 96-well V-bottom culture to imaging plates**

|  |  |  |
| --- | --- | --- |
| 97.92% | 93.75% | 96.34% |
| 91.86% | 98.96% | 100.00% |

**Step 3 – Percentage of samples acquired by the automated high content confocal imaging system that pass image analysis quality control**

|  |  |  |
| --- | --- | --- |
| 93.75% | 92.71% | 95.31% |