Data courtesy of Specially Appointed Prof. Uemura, Faculty of Engineering, The University of Osaka.

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## Dimpled plate medium change by MakCell

Cell type: 253G1

Culture medium: AK02N (Ajinomoto), CultureSure Y-27632 (Wako)

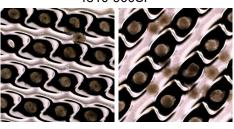
Culture plate: EZSPHERE (IWAKI) 4810-900SP (6well), 4020-900 (Ф100mm)

Medium volume: 3.4mL/well (4810-900SP), 17mL (4020-900)

Replacement medium volume: 0.9mL x 3 times (4810-900SP), 5.6mL x 3 times (4020-900)

## **RESULTS**

No differences in the spheroid shape were observed in MakCell compared to manual operation. However, the number of small granular spheroids decreased. In 4810-900SP, the mode frequency was 220 µm.

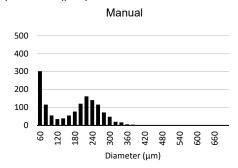


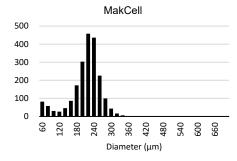
Manual MakCell

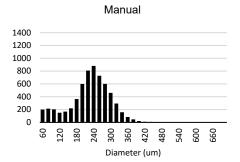


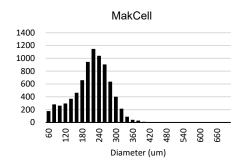
Manual MakCell

## Number of spheroids (pcs)









## DISCUSSION

We observed the cell aggregates fewer small sizes that appear to have collapsed and no large sizes that appear to have merged. This result suggested that collapse within dimples and migration between dimples have decreased. This result is thought to be because there is little effect of the movement of the turn-table and/or the feeding of the medium on the cell aggregates in MakCell's culture. This indicates that the MakCell is an effective device for dimple plate-like culture methods.





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