Application Note

CELLFLOAT

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Data courtesy of Prof.Uemura, The University of Osaka, Japan

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Gas-permeable ability of disposable culture vessel

Case1
Cell type: 253G1 (RIKEN BRC)
Culture medium: AK02N (Ajinomoto)
Case2
Cell type: MG63 (Osteosarcoma) with collagen sponge
Culture medium: DMEM (Wako)、10% FBS、Antibiotic / Antimycotic (ThermoFisher)

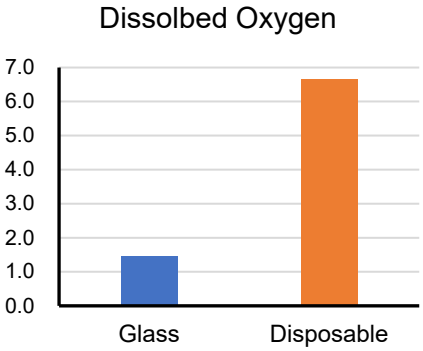
Vessels: Glass culture vessel, Disposable culture vessel
Speed: 6-20 rpm

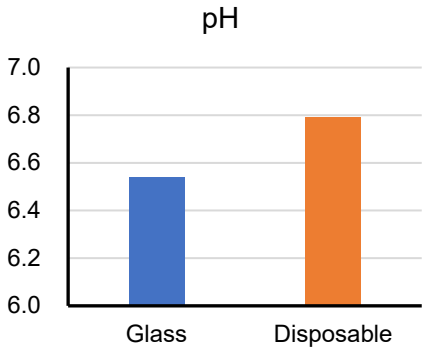
METHOD

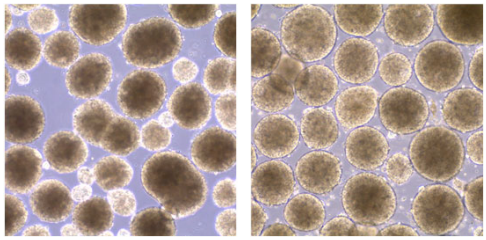
SevenExcellence S900; pH/ DO (MetraTredo)

RESULTS

Case1: hiPSCs

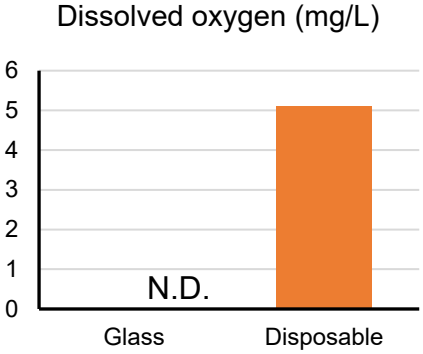


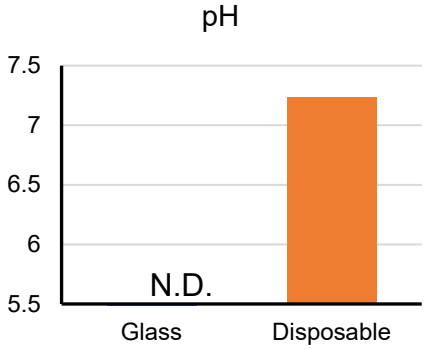




After culturing iPSCs for 3 days

Case2: MG63 (Osteosarcoma)





After culturing MG63 cells for 9 days

Human iPS cells were able to form spheroids in both culture vessels, but dissolved oxygen levels were greatly reduced during culture in glass.
Osteosarcoma cells could not be cultured in the glass vessel but could be cultured in the disposable one.

CONCLUSION

It was suggested that the disposable culture vessel was oxygen permeable enough to allow the culture of cancer cells.

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