

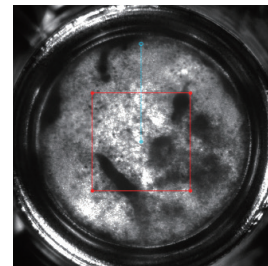
Thickness of cell sheet

KEYWORD 1) 3D culture 2) Label-free 3) Cell sheet 4) Tissue

OBJECTIVE NHDF sheets were imaged by Cell3iMager Estier, and thickness of sheets were calculated from these images.

Materials and Methods

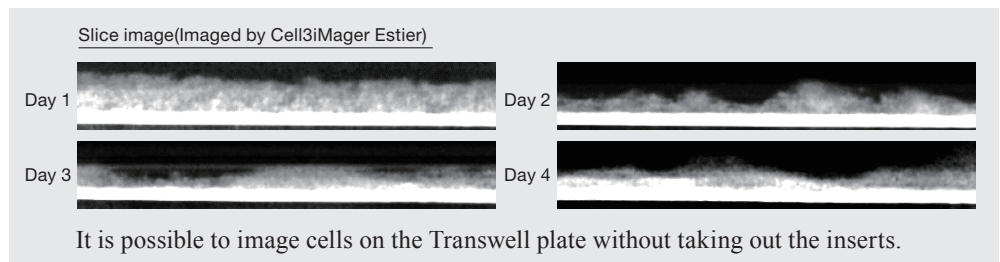
Cell Line: NHDF (PromoCell)
 Medium: DMEM (Nacalai tesque)
 Kit: Cell layered culture reagent
 Plate: Transwell® 24well 0.4µm (Corning)
 Seeding cell density: 2.15×10^5 cells / well
 Culture days: 4 days after seeding
 Imaging parameters : (Lens) Low magnification les
 (Scan Pitch) 5µm
 (Scan Area) 3000µm x 3000µm



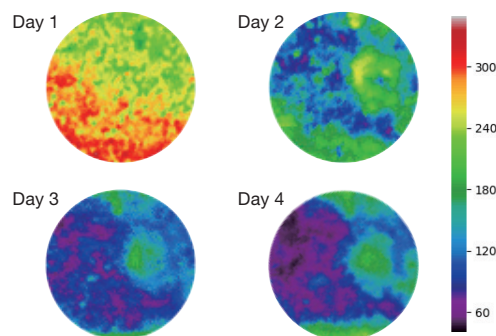
Bright-field image
(Red frame : Scan Area)

Results and Conclusions

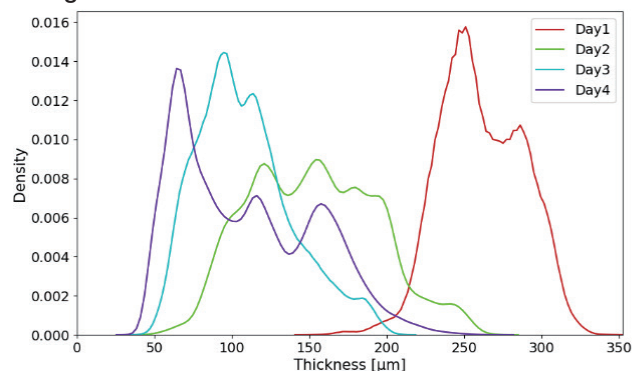
- It is possible to quantify the changing thickness of cell sheets without damaging cells.



Visualization of thickness (Heat map)



Histogram of thickness



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