

# ASFA™ Spotter

: Accuracy, Simple & Fast  
3D Cell/ECM Dispenser

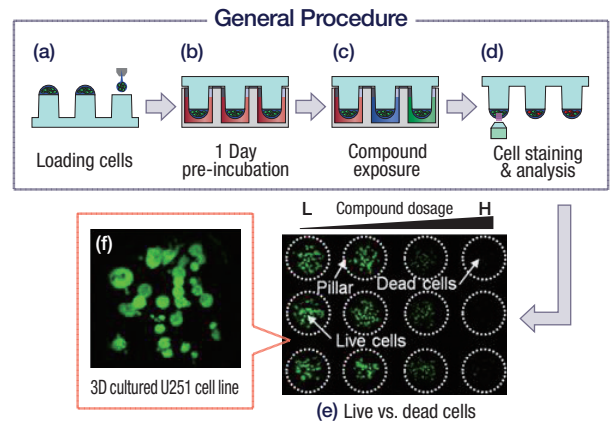
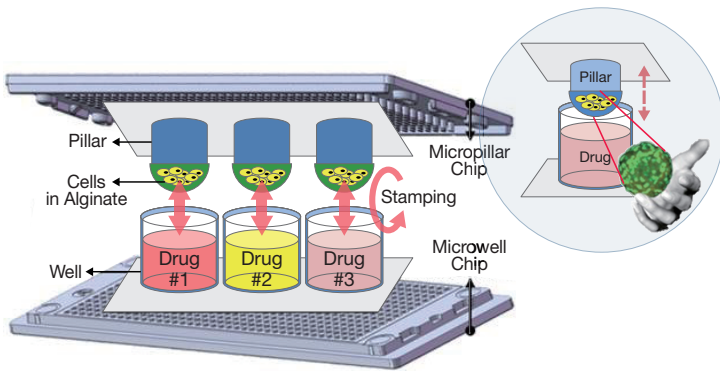


## Comparison of 3D cell culture platform

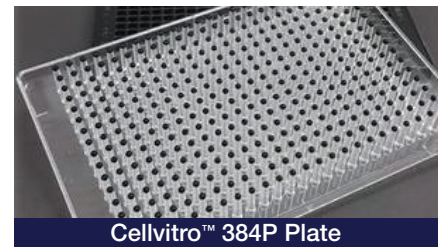
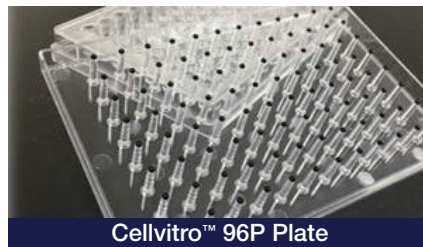
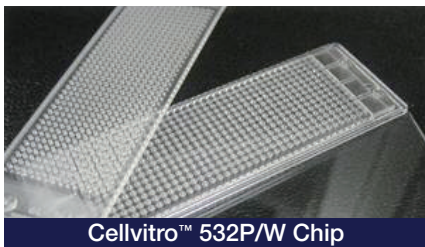
	Conventional 24 (96) Well Plate	Cellvivo™ 532P/W Chip
Schematic View		
Throughput	24 (96) wells in 86 mm x 128 mm	534 pillar/wells in 25 mm x 75 mm
Seeding Cell Number	10,000~100,000 cells/well (1,000~10,000 cells/well)	20~ 300 cells/spot
Working Volume	1,000~2,000 µl (100~200 µl)	0.7~0.95 µl
Washing Step	Tedious & difficult washing (Suction & filling)	Easy & one step washing (Stamping)

# Cellvitro™ Pillar/Well Platform

: 3D Cell-based High Throughput Screening

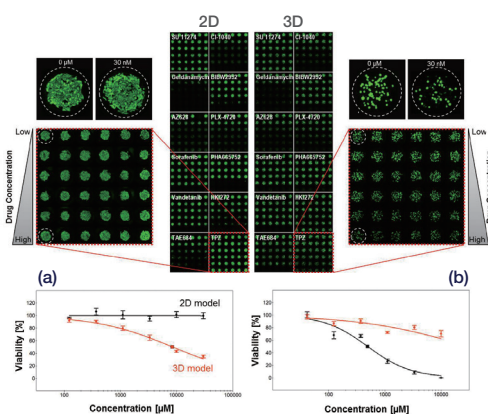
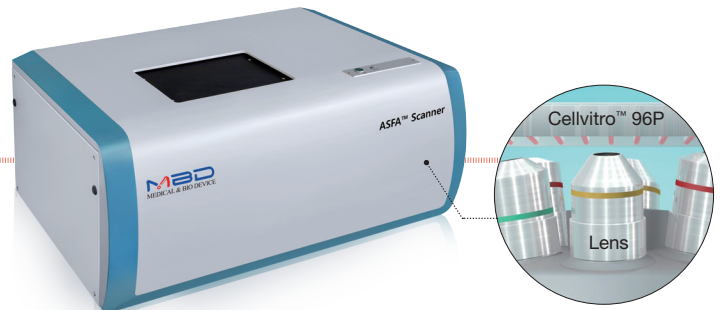


Schematic view of pillar/well platform and experimental protocols for drug efficacy testing: (a) dispensing cells in alginate on the top of the micropillars, (b) immersing cells in the microwells containing growth media to maintain high cell viability, (c) dispensing drugs into the microwells and exposing cells to drugs by sandwiching two chips together, (d) staining cells with calcein AM and scanning the micropillar chip for data analysis, (e) analyzing scanned images with live and dead cells at different drug dosages, (f) a blow-up image of 3D cultured SW620 cells in 50 nL alginate spot.

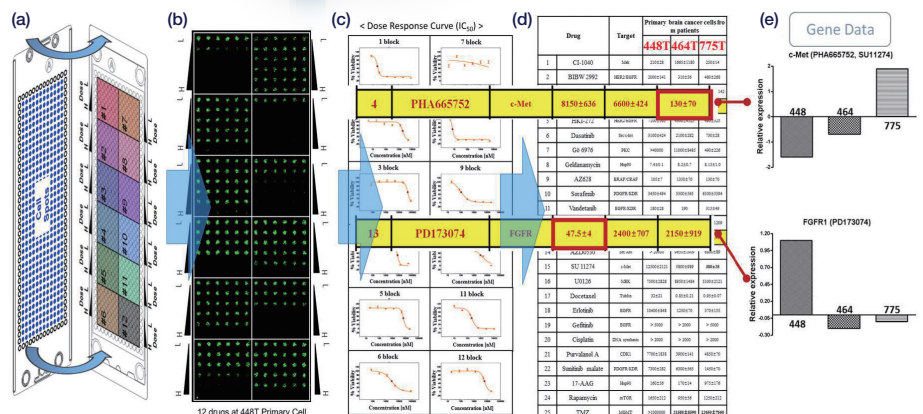


# ASFA™ Scanner

: Accuracy, Simple & Fast  
3D Cell Imaging & Analysis



Fluorescent images of 532 pillars exposed with 12 different compounds for both the 2D and 3D models. Dose response curves of the A549 cancer cells in the 2D and 3D models with the measured  $IC_{50}$  values (square dots): (a) TPZ, and (b) HK1272



Drug efficacy tests of patient derived cell (Glioblastoma). (a) The layout of Cellvitro™ 532P/W for screening 12 drugs per chip (6 doses, 6 replicates). (b) Scanned image of a single micropillar chip exposed to 12 drugs. (c) Obtained dose 12 response curves and their corresponding  $IC_{50}$  values. (d)  $IC_{50}$ s of 3 patient derived cells. (e) Gene Data mapping with  $IC_{50}$ s

For more information, Please Contact us  
[sales.fsk@thermofisher.com](mailto:sales.fsk@thermofisher.com)

For Research Use Only. Not for use in diagnostic procedures. © 2017 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

**ThermoFisher**  
SCIENTIFIC