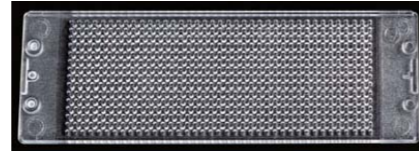


- New 3D cell culture system for cell biology and screening applications
- Alginate or Matrigel-based extracellular matrix environment (ECM)
- 3S : Simple to use, small sample size and cost savings

## Micropillar Chip for cell encapsulation

- Material : Polystyrene
- Recommended working volumes of 40 to 80 nL
- Flexible for 2D cell culture on the surface of micropillar
- 532 micropillars of 75 x 25 mm
- 0.75 mm pillar diameter & 1.5 mm pillar-to-pillar distance

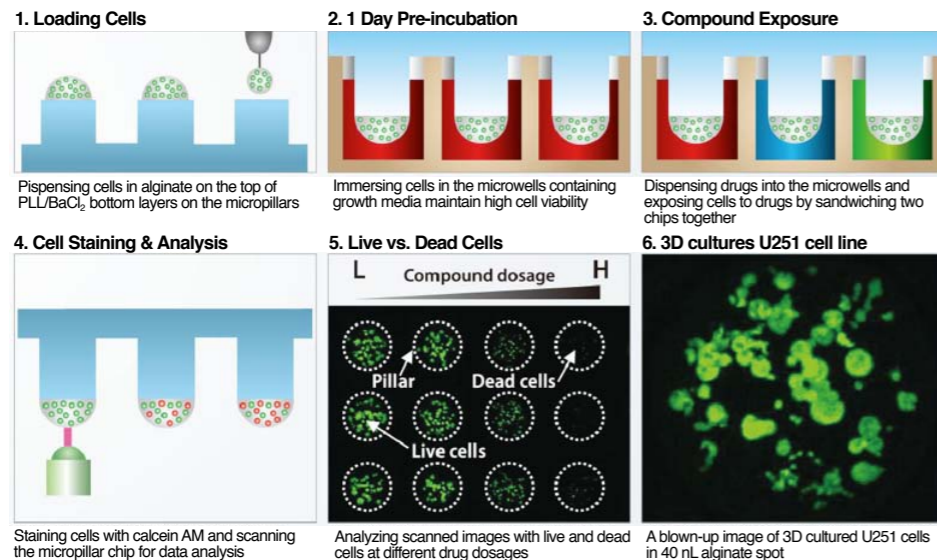


## Microwell Chip for enzymes, viruses, media, or test compounds

- Material : Polystyrene
- Recommended working volumes of 750 to 1000 nL
- 100 % media exchangeable
- 532 microwells of 75 x 25 mm
- 1.2 mm well diameter & 1.5 mm well-to-well distance



## Experimental procedures for drug efficacy testing



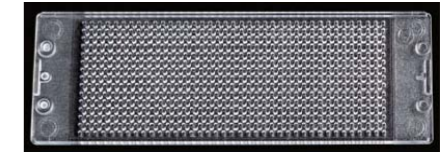
## Technical literature

- Lee et al., Sensors and Actuators B: Chemical. Vol.177, 2013. pp.78-85
- Lee et al., Archives of Toxicology, 2013 (On-line): "Application of the Data/MetaChip technology for the evaluation of ajoene toxicology in vitro"
- Lee et al., Analytical Chemistry, 2013 (On-line): "High-Throughput Screening of Anticancer Drug Efficacy on a Micropillar/ Microwell Chip Platform"

- 세포 생물학 및 약물 스크리닝에 적용 가능한 새로운 3D 세포 배양 시스템
- 알지네이트(alginate) 또는 매트리지젤(matrigel) 기반의 세포외 기질(ECM) 이용
- 3S : Simple use, Small sample & Save cost

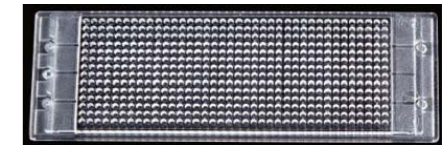
## 세포 캡슐화를 위한 Micropillar Chip

- 재질 : 폴리스티렌
- 권장 샘플 부피 : 40 ~ 80 nL
- Micropillar 칩 표면에 2D 세포 배양도 가능
- 75 x 25 mm 크기의 칩 위에 532개의 micropillar
- 0.75 mm의 pillar 지름, 1.5 mm의 pillar 간격

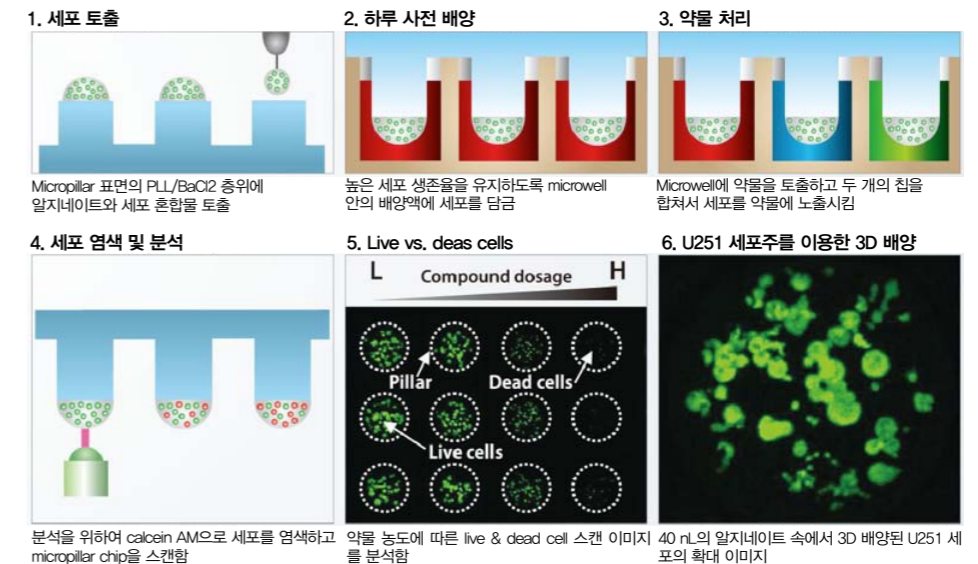


## 효소, 바이러스, 배양액, 약물의 토출을 위한 Microwell Chip

- 재질 : 폴리스티렌
- 권장 샘플 부피 : 750 ~ 1000 nL
- 100 % 배양액 교체 가능
- 75 x 25 mm 크기의 칩 위에 532개의 microwell
- 1.2 mm의 well 지름, 1.5 mm의 well 간격



## 약물 효능 테스트를 위한 실험 절차



## 참고 문헌

- Lee et al., Sensors and Actuators B: Chemical. Vol.177, 2013. pp.78-85
- Lee et al., Archives of Toxicology, 2013 (On-line): "Application of the Data/MetaChip technology for the evaluation of ajoene toxicology in vitro"
- Lee et al., Analytical Chemistry, 2013 (On-line): "High-Throughput Screening of Anticancer Drug Efficacy on a Micropillar/ Microwell Chip Platform"