

μpattern MecaChips®

CONTROL YOUR MECHANICAL CELL ENVIRONMENT AT THE MICROMETER SCALE

Why using μpattern MecaChips® culture plates?

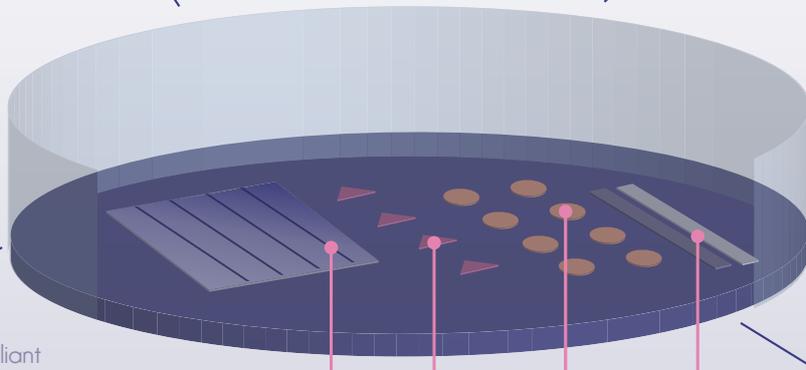
In vivo tissues are soft, elastic and mechanically textured. Living tissues rigidity properties present microscale variations that can play a crucial role in cell response (in a same tissue, rigidity varies from Pa/mm to kPa/μm). Relying on unique patented technologies and know-how derived from the microelectronic field, the mechanical properties of MecaChips® matrices can be finely tuned up to the μm scale to replicate such variations.

Description

MecaChips® soft and micro-patterned culture plates are new and physiological solutions for *in vitro* cell culture, that mimic the mechanical cell environment, all while giving you the chance to control it at the micrometer scale.

Benefits

- | Relevant, disruptive & compliant
- | Ready & easy to use
- | No biological risk (synthetic matrix)
- | Glass bottom
- (ideal for microscopy)
- | Stiffness & coating are decoupled



Steps & gradients of rigidity

Geometric pattern

Applications

Areas

- Basic research |
- Stem cells oncology |
- Neurology |
- Cardiology |

Tools

- Adhesion |
- Cell shape standardization |
- Cell confinement |
- Cell migration |

Characteristics

Storage

- Temperature: +4°C |
- Shelf life: 3 months |

Get your own fonctionnal μpattern MecaChips® culture plate:

1 CHOOSE YOUR PATTERN

Geometric pattern

- Scale : subcellular to cellular
- Size & shapes* : Dots 0.5 to 100 μm
- Triangles 10 to 100 μm
- Stripes 5 to 100 μm

Step

- Scale : tissue
- Size : 4.6 mm/step

Gradients

- Scale : tissue
- Size : Pa/mm to kPa/μm

*Custom patterns & rigidity on request

2 CHOOSE YOUR COATING

Culture dedicated surface chemistry

Vitronectin
(human, recombinant truncated)

Fibronectin
(human, plasma)

Collagen I
(rat, tail)

Laminin
(mouse, EHC sarcoma)

Poly-Ornithine / Laminin

Poly-Ornithine

3 CHOOSE YOUR FORMAT

PD35mm



P6 on request

P96 soon