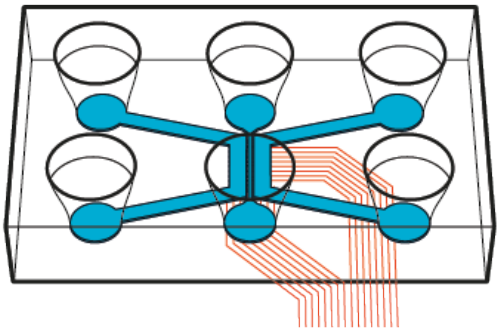
DUALINK™ MEA

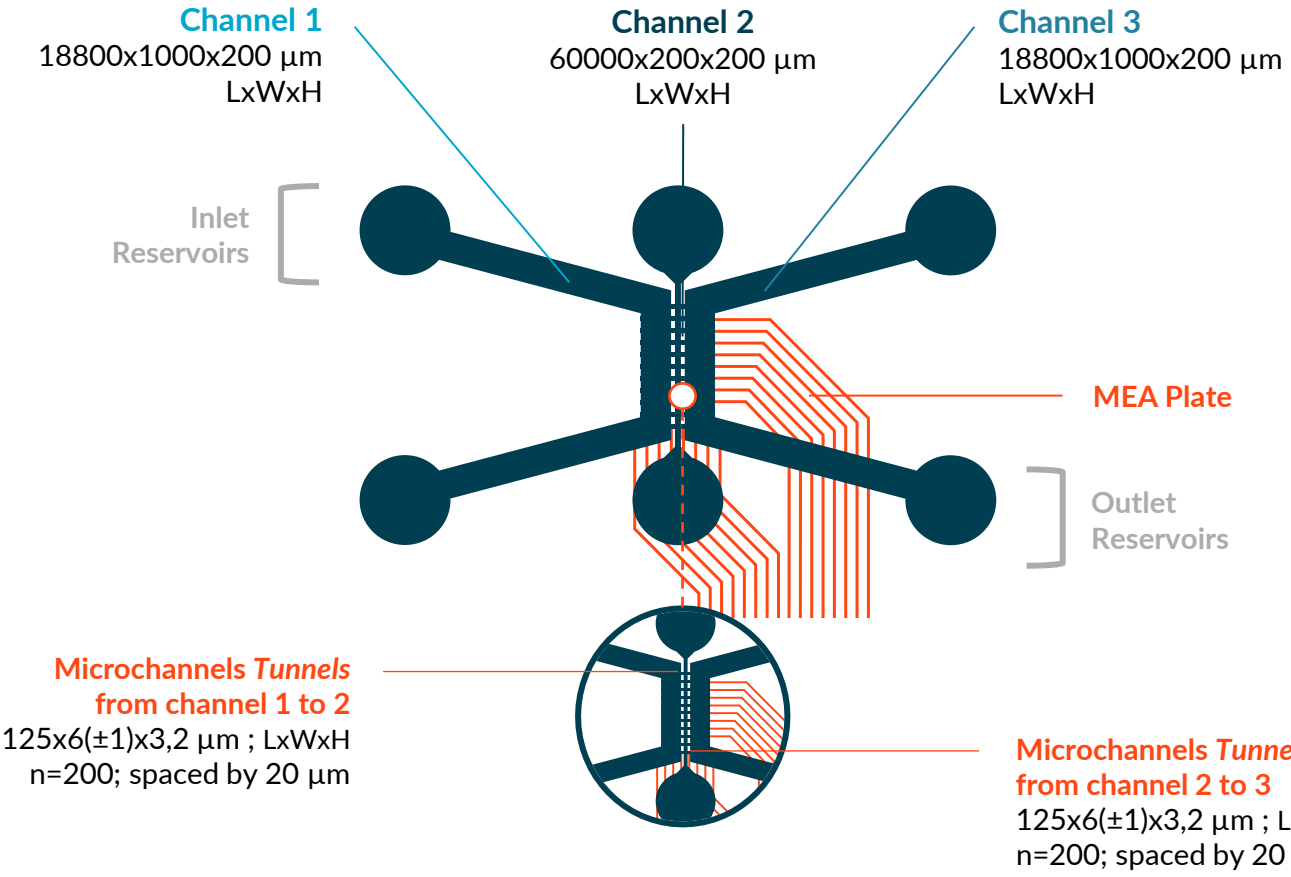


The DuaLink™ MEA is a 3-compartments chip, connected by microchannels *tunnels* technology that allow discontinious connectivity and crowned on a MicroElectrod Array (MEA) Plate.

2 compartments for cell culture and 1 for fluidic isolation.

Due to their micron scale, only cell extensions can grow within the microchannels, leaving the cell bodies withing the compartments themselves.

TECHNICAL SPECIFICATIONS



Surface Area

Channel 1
18.8 mm² (32.9 mm² with reservoirs)
Channel 2
1.2 mm² (15.3 mm² with reservoirs)
Channel 3
18.8 mm² (32.9 mm² with reservoirs)

Volumes

Channel 1
3.8 µL (117.7 µL with reservoirs)
Channel 2
0.24 µL (114.1 µL with reservoirs)
Channel 3
3.8 µL (117.7 µL with reservoirs)

Formats

Microfluidic chip
3x2 wells
QuarterBentos™
4 chips
(52,6x34,6x6,2)
NeoBento™
SLAS standard 96-well plate
(127,8x85,5x17,1 mm)

Materials

Microfluidic chip
PolyDiMethylSiloxane biocompatible and low compound absorbing
(layer 170 µm thick + refractive index: 1.4)
NeoBento™
Polystyrene (1.4 mm thick + refractive index: 1.59)

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DUALINK™ MEA

APPLICATIONS

Neurological applications

- Co-culture (neurons/skin cells, neurons/glial cells...)
- Analysis of the functional influence of a non-neuronal cell population on neurons
- Axonal transport
- Neuroinflammation (Multiple sclerosis, Cerebral tumors...)
- Innervated skin
- Neuromuscular junction
- Motor neuron diseases (Amyotrophic Lateral Sclerosis...)

Neuro-Cosmetic applications

- Skin nociception
- Itch
- Ageing
- Wound healing

Neuro-Toxicology applications

- ADME
- Preclinical Drug screening
- Quantitative assays
- Virology (viral transfection in one compartement only)

And more...

READOUTS

- Structural and functional analysis
- Electrophysiology
- Lysis Cell Analysis (LC / MS)
- Live Dead Assays
- Live Staining
- ImmunoFluorescence
- ELISA Active Biomarkers
- Calcium Imaging
- Human cells (apparently healthy, diseased, engineered...)
- Rodent cells

MORE INFORMATION

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