Product Data Sheet (DS)





NeuroFluidics NeoBento Dualink LIGHT (Acro Certified)

Catalog No.: NFDL-1

NeuroFluidics Line

High-throughput compartmentalized organs-on-chip devices for 2D cell culture

- Variety of architectures and related applications
- Variety of readouts compatibility
- Microchannels compartmentalization

Features

Specially designed to recreate different cellular microenvironment for co-culture of 2 different cell types with fluidic isolation.

- LIGHT Version: 8 Chips & Data points per plate
- Discontinuous connectivity

Technical Specifications	
Surface Area:	• Channel 1: 18800 × 1000 × 200 μm (L × W × H), 18.8 mm² (32.9 mm² with reservoirs)
	• Channel 2: 6000 × 200 × 200 µm (L × W × H), 1.2 mm² (15.3 mm² with reservoirs)
	• Channel 3: 18800 × 1000 × 200 µm (L × W × H), 18.8 mm² (32.9 mm² with reservoirs)
	• Microchannels Tunnels: $125 \times 6 \ (\pm 1) \times 3.2 \ \mu m \ (L \times W \times H)$; n=200; spaced by 20 μm
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)
Materials: Formats:	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)
	• Microfluidic chip: 3 × 2 wells
	• QuarterBentos: 4 chips $(52.6 \times 34.6 \times 6.2)$
	• NeoBento: SLAS standard 96-well plate (127,8 × 85,5 × 17,1 mm)
Functions and Readouts	
Capabilities:	Co-culture & compartmentalization
	hiPSC derived cell
	Axonal transport
	Functional analysis
Applications:	Drug screening
	Innervated skin
	Toxicology
	• Virology
	Neuroinflammation
	Neuromuscular junction
	Motor neuron diseases
	Study of the functional activity of neurons
Readouts:	Immunofluorescence
	Live Dead Assays
	Live Staining
	Liquid chromatography
	Mass Spectroscopy



Product Data Sheet (DS)





- Lysis cell/supernatant analysis
- ELISA
- Calcium Imaging
- Electrophysiology

Acro Certify Disclaimer

This product is one of ACROBiosystems' Acro Certify products. ACROBiosystems and our Acro Certify partners have established a close partnership that includes an in-depth review of quality management and quality audits this product. Products from our Acro Certify partners have been qualified by ACROBiosystems to be included under Acro Certify. ACROBiosystems may provide Product information, including technical information, specifications, recommendations, literature, and other material (collectively, "Product Information") for customer's convenience. The accuracy and completeness of Product Information is not guaranteed and is subject to change without notice. ACROBiosystems is not responsible for the intellectual property or impact to intellectual property for products sold under Acro Certify.

