






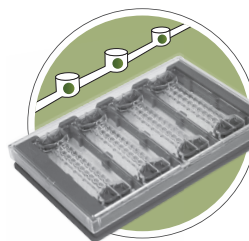


# Akura™ Flow Microphysiological System

Akura™ Flow is a multi-tissue, microfluidic assay format engineered for biology insight, and available exclusively for 3D InSight™ Microtissues. A highly flexible microphysiological system (MPS), Akura™ Flow provides experimental continuity between single- and multi-tissue testing applications, enabling seamless integration and optimal utilization of the InSphero portfolio of standardized 3D models. Complete systems include pre-qualified 3D InSight™ Microtissues, media, assays, and a tilting-based flow control device.

- **Minimize cell, medium, and compound use** in a miniaturized 10-microtissue configuration that increases cell to media volume ratio up to 10-fold
- **Achieve maximum physiological complexity while minimizing operational complexity** in an automation-compatible tubeless, tilting-based medium perfusion system that interconnects 3D InSight™ assay-ready models
- **Compare numerous conditions in parallel on one plate** that enables throughput-compatible testing in a scalable microphysiological system with virtually unlimited statistical replicates
- **Perform diverse experimental endpoints**, from cell-based and biochemical assays to on-chip HCL, with flexible liquid sampling and non-disruptive microtissue retrieval

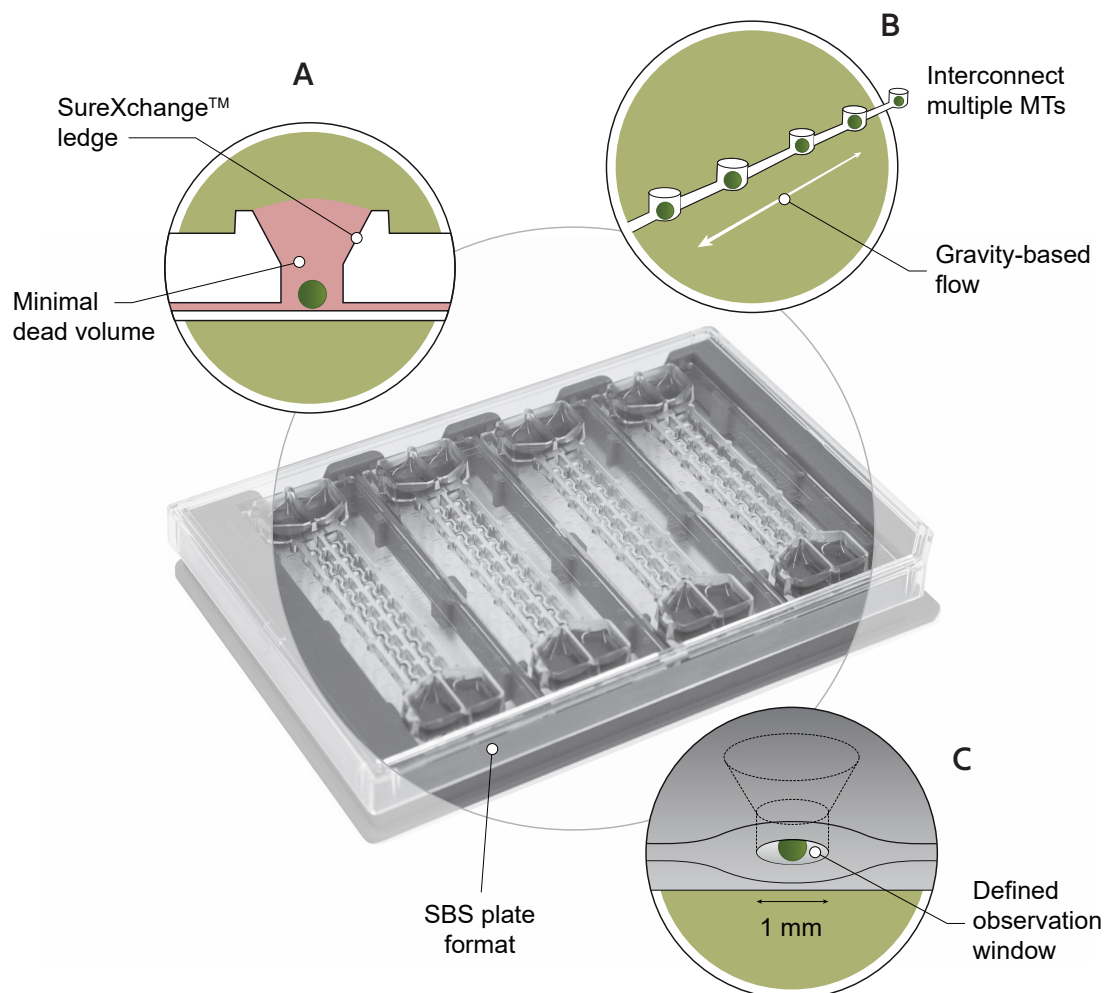
Sample MPS Applications	Configuration
Flexible design ideal for a broad range of pre-clinical applications	Mix and match microtissues
<b>Low clearance predictions assays</b> set up to multiply function of a single microtissue type	Liver 
<b>Bioactivation of prodrugs</b> with 3D InSight™ liver and tumor model co-cultures	Liver   Tumor  
<b>Metabolic disease modeling</b> with 3D InSight™ Human Liver and Islet co-cultures	Liver   Islet  
<b>Metabolic competence assessment</b> with 3D InSight™ Human Liver in co-culture with your model of choice	Liver   ?  



**Become an Akura™ Flow Development Partner and help us test new applications for this next-generation discovery platform.**

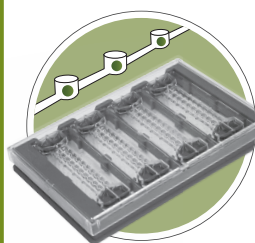
## Akura™ Flow microfluidic multi-tissue platform

Akura™ Flow makes microfluidic technology accessible to bench scientists who understand the biology they need to interrogate. It enables culturing of InSphero 3D InSight™ Microtissues under physiological flow conditions, with the flexibility to interconnect and culture different types of microtissues and enable multi-tissue configurations.



**Increase physiological complexity while maintaining experimental simplicity.** **A.** Simplify reliable and parallelized microtissue loading and retrieval with our unique SureXchange™ funnel design, and straightforward media sampling and exchange in an SBS standard plate format. **B.** Improve tissue-specific in vitro functionality in optimized microtissue flow chambers and interconnecting microchannels for controlled dynamic flow, providing efficient nutrient and oxygen supply while enabling paracrine/endocrine intertissue communication. **C.** Eliminate compound absorption using a PDMS-free, full-polystyrene platform and our proven, long-term stable ULA coating.

### Akura™ Flow Microphysiological System



#### Format

- 8 independent microchannels
- 10 microtissue compartments per channel

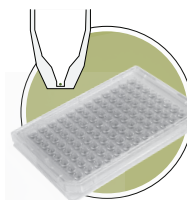
#### Availability

- Coming in 2019, available for collaborative development now

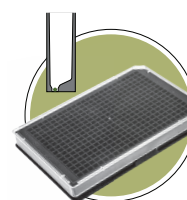
#### Pricing

- Please inquire

### Akura™ Technology for 3D InSight™ Microtissues



**Akura™ 96 plate**  
for 3D cell-based assays



**Akura™ 384 plate**  
for HCI and HTS

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InSphero is ISO 9001:2015 certified

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