



Akura™ Flow
Organ-on-a-chip

The next best thing to human for drug discovery and safety testing

Proven 3D InSight™ Platforms

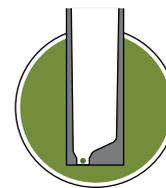
- Liver Disease (NASH & Fibrosis)
- Diabetes (Type 1 & 2)
- Oncology (I-O & PDX)
- Liver Toxicology
- Organ-on-a-chip Networks

Powered by Akura™ Technology

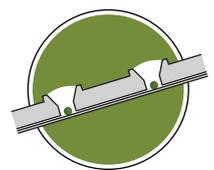
Microtissue plate formats Organ-on-a-chip



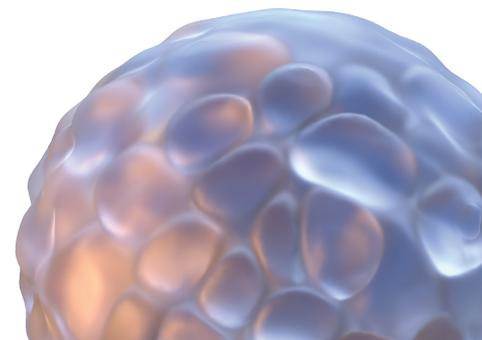
Akura™ 96



Akura™ 384



Akura™ Flow



Unlock the power of 3D

to better understand complex human pathophysiology

InSphero 3D InSight™ *in vitro* human tissue platforms are precisely engineered to increase efficiency in drug discovery and safety testing. When you partner with InSphero, you gain access to proven 3D cell-based solutions used by major pharmaceutical companies worldwide. Our comprehensive platforms for metabolic disease, oncology, and liver toxicology are built on scalable, tunable models, specialized media and inducers, expert scientific support and detailed 3D cell-based assay protocols, with the option to bring our models in-house or outsource assay services to our team of 3D experts. The scalable Akura™ technology, which underlies all our 3D InSight™ Discovery and Safety Platforms, includes 96- and 384-well plate formats as well as our unique Akura™ Flow organ-on-a-chip system. Together, InSphero platforms and 3D technologies are designed to drive efficient innovation throughout all phases of drug development.

3D InSight™ Liver Disease Discovery

Complex human liver microtissue models with the four liver cell types necessary to faithfully recapitulate the progression of human fatty liver disease from steatosis to NASH and fibrosis.

- Investigate mechanisms of disease induction with a 21-day window for longitudinal studies
- Screen NASH drug efficacy *in vitro*
- Perform safety assessments of potential drug candidates

3D InSight™ Diabetes Discovery

Uniform, functionally robust, long-lived islet models derived from primary islets, ideal for studying type 1 and type 2 diabetes, as well as pancreatic islet function, regeneration, and preservation:

- Assess α -cell and β -cell function
- Monitor Islet viability and apoptosis
- Assess compound safety with drug-induced pancreatic endocrine injury screening

3D InSight™ Oncology Discovery

Custom-designed oncology models, produced from cancer cell lines or PDX materials, that better reflect complex tumor biology by combining relevant tumor, stromal, and immune components.

- Assess cancer drug efficacy
- Evaluate antibody-penetration kinetics
- Monitor tumor-specific cell killing by activated immune cell components

3D InSight™ Liver Toxicology

Advanced, pharma-validated human liver toxicology models, produced using primary hepatocytes and non-parenchymal liver cells, to accurately reflect the structure and biology of *in vivo* liver.

- Screen for and predict DILI potential
- Conduct mechanistic and Investigative tox studies

Akura™ Plate & Organ-on-a-Chip Technology

Engineered specifically for use with 3D InSight™ human tissue models, Akura™ technology ensures continuity across microtissue platforms and formats. It provides a path forward to efficiently upgrade to innovative new 3D-cell-based technology with practical applications in industry. Akura™ is the only technology platform to exploit the full potential of 3D models for drug discovery and safety testing.

- Safe, secure handling and long-term stability
- Automation friendly
- high-throughput compatible
- Superior imaging capabilities
- Unrivaled organ-on-a-chip solutions

Visit us at [insphero.com](https://www.insphero.com) to learn how you can unlock the power of 3D with InSphero.

The next best thing to human
3D InSight™ Discovery and Safety Platforms

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InSphero is ISO 9001:2015 certified

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