

GravityPLUS™ 3D Culture and Assay Platform

The industry-leading solution for reliable, scaffold-free 3D cell-based assays

- Proven reliability and ease of use with many liquid-handling systems
- SureDrop™ technology assures precise microtissue size – always!
- Includes the GravityTRAP™ plate for long-term culture, assays and imaging

3D cell culture the easy way

Scaffold-free re-aggregation of single cells into functional 3D microtissues has been a tricky task in the past. With the introduction of the GravityPLUS™ platform in 2009, InSphero made reliable, automation-compatible and affordable 3D cell culture in hanging drops a reality. Since its introduction, the GravityPLUS™ platform has proven its ease of use and versatility 1000s of times in laboratories ranging from academic research to high-throughput screening.

Today, all top 15 global pharmaceutical and cosmetics companies use InSphero's 3D microtissues produced using the GravityPLUS™ platform.

Contact us today to try it, too!

Applications

- Scaffold-free 3D cell culture of any cell type, including primary and stem cells, cell lines and genetically modified cells
- Compound testing and de-risking
- Cell-biology studies and tissue engineering
- Stem-cell differentiation
- High-content analysis and microscopy
- Migration from scaffold-based processes to scaffold-free production for scale-up

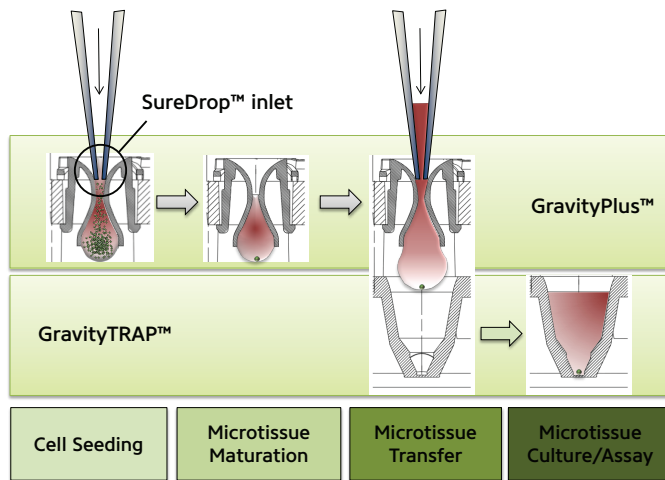
GravityPLUS™ 3D Cell Culture and Assay Platform

The easy way to a robust 3D cell-based assay



Two plates, one platform

The patented* GravityPLUS™ plate makes hanging-drop cell culture easy. Simply load up to 50 µL cell suspension from the top with any liquid handling device – from a manual pipette to a 96-tip robot. Within 2-4 days, a single microtissue forms in each drop. For long-term culture or differentiation, you can even remove up to 70% of the medium and replace it through the top port.



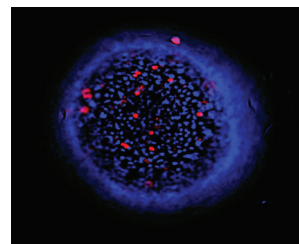
Once the microtissues are formed, they can easily be harvested into the GravityTRAP™ plate with a simple media addition step. The proprietary non-adhesive coating of the GravityTRAP™ plate allows for culturing over weeks without attachment and decomposition of the microtissues. In addition, its unique design allows reliable medium exchange without microtissue aspiration and excellent imaging, e.g. high-content analysis, through a window at the well bottom.

* The GravityPLUS™ platform is the first hanging-drop system of its kind and is patent protected (EP2342317, WO2010031194A1 pend., WO2012014047 pend.).

Precise size control: SureDrop™

A reliable 3D cell-based assay starts with precise control over the microtissue size. InSphero's products are the only on the market featuring our patent-pending SureDrop™ microtechnology, which allows for precise dispensing into and aspirating from hanging drops. As the drop volume corresponds to the seeding cell number, microtissues produced in GravityPLUS™ plates display outstandingly low diameter variations down to 5% and less.

The SureDrop™ wells are elastically suspended and mechanically adjust to the pipette tip to assure a tight seal between tip and inlet. SureDrop™ eliminates operator and instrument variations reliably.



High-content image of a HepG2 microtissue produced in the GravityPLUS™ platform.

Image provided by Imagen Ltd. (www.imagen-biotech.com)

Ordering information

Catalog #	Description
CS-06-001	GravityPLUS™ 10× Kit (96-well), includes 10 GravityPLUS™ and 10 GravityTRAP™ plates

Please also inquire about our 384-well solutions, which will be available in Q4 2013. Same reliability, higher throughput.

For pricing and details, visit us at www.insphero.com/gravityplus or contact our local branch offices and authorized distributors.



QR Code

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