

# **NEW: PAMCELL**™

3 Dimensional Cell Culture Plates

#### What is PAMCELL™?

PAMCELL™ is a 3-dimensional cell culture plate which enables the formation of a wide range of uniformly sized spheroids. Plates are composed of hexagonally-arrayed spherical particles coated with cells adhesively controlled functional groups on the surface. These plates allow for the control of cell-to-substrate and cell-to-cell interactions.

- Enables formation of a wide range of uniformly sized spheroids
- Provides various patterns on a single plate without physical barriers
- Optically transparent for in situ microscopic observation in automated high throughput screening systems
- Easy to exchange culture medium (spheroids are stably attached on plate surface)

# PAMCELL™ Cell Culture Plates are available in two types

- R Series Plates (96-well/6-well): R-100 R-600
- T Series Plates (96-well):
  Test Culture Plate 1
  Custom-made Plates

#### **Structure of PAMCELL™**

**Lid:** Polystyrene, Clear **Body:** Polystyrene, Clear (USP Class VI tested)



**Substrate:** PET Film, Clear (100µm thick) or COP Film, Clear (188µm thick — fluorescence free



**Particle:** Typically 700nm silica particle coated with ECM motif (ex. RGD) peptides —————

Non-fouling Polymer:

(ex. PEG)

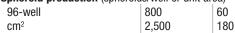
### **Ordering Information**

Cat. No.	Description	Qty.
64830-01	R Series 96-well Plate	each
64830-02	R Series 6-well Plate	each
64830-03	Test Culture Plate 1	each
64830-05	Custom-made Plate	each

#### R Series, 96-Well/6-Well Plates

For uniform, large spheroid production on a culture plate with uniform pattern and surface condition. Suitable for HTS Screening (Imaging automation).

<b>Specifications</b>	R-100	R-600				
Micropad arrangement	Square	Hexagonal				
Diameter of micropad (µm)	100	600				
Gap between micropads (µm)	100	200				
3D Spheroid formation	Cell	Aggregation				
	proliferation					
Spheroid production (spheroids/well or unit area)						

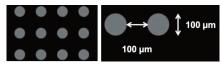


<sup>1)</sup> Width of line: 3 µm w/48 lines





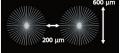
#### R-100 Plate (Spheroid dia: 80~130μm)



- For small sized cells (ex. tumor cells)
- · Anti-cancer drug screening (lc50), Toxicity test
- Patient tumor cells + stromal cells co-culture

R-600 Plate (Spheroid dia: 150~300µm)





- For primary cells (ex. fibroblast, stem cells)
- Regeneration medicine (cell printing, cell therapy)

#### T Series. 96-Well Plates

#### **Test Culture Plate 1**

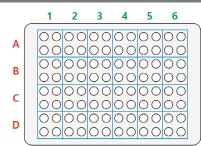
For wide ranges of spheroid size and spheroid networking.

#### **Custom-Made Plates**

Column

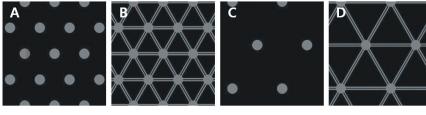
Row

User's requested design plate (select from the Test Culture Plate 1 or new user-designed pattern).





	1	2	3	4	5	6
Circle Dia. (µm)	50	100	150	200	250	400



100 µm gap A & Connection Line

200 µm gap

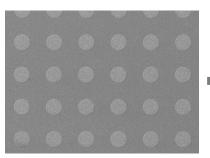
**C & Connection Line** 

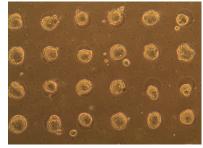
#### **PAMCELL™ 3 Dimensional Cell Culture Plates**

# **Applications**

#### **Spheroids (tumors, stem cells)**

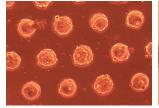
- HTS (Anti-cancer, Toxicity), Disease models
- Tissue spheroid mass production(~800 spheroid/96-well)



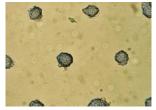


R100

HT-29 (Colon)





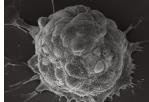


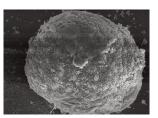
FaDu (Pharyn)

A549 (Lung)

SH-SY5Y (Nerve)







FaDu (Pharyn)

A549 (Lung)

HT-29 (Colon)



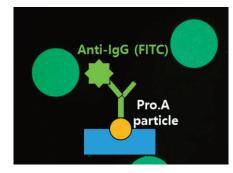






**Whitening Test** 

**Surface Marker** 

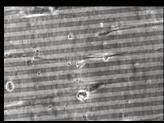


#### Single Cell Assay (Response/Differentiation)

**Adipose Derived Stem Cells (ADSC)** 







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