PrimeSurface

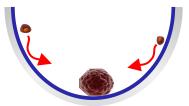
Bringing 3D Cells Culture for Reliable Anticancer Drug Screenings and Regenerative medicine

- High throughput drug screening
- Available in multiple formats include 384 well microplate



- Sterile, Ready-to-use, Individually packed
- Promotes uniform size, Single spheroid in one well
- Luminescent detection on same plate
- High volume well capacity
- Compatible with liquid handling systems

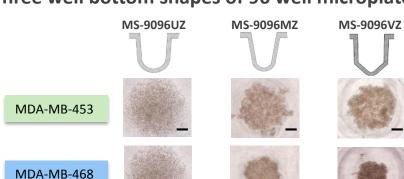
Biocompatible hydrophilic polymer on the surface promotes cell aggregation



Single spheroid can be formed in each well

Spheroid formation can be observed easily

Three well bottom shapes of 96 well microplate



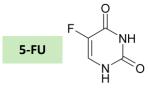


Seeding Density: 2x103 cells/well, Culture Medium: RPMI + 10%FBS, Incubation: 37°C, 5%CO₂, Culture Period: 7 Days MDA-MB-453, MDA-MB-468: human breast cancer



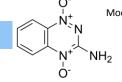
Data are provided by Nishio Lab., Dept. of Genome Bio. Kinki Univ. Faculty of Medicine

Application example: The difference of drug efficacy mode between 5-FU and TPZ



Mode of action:

- Is effective against any cell type
- Effects the protein synthesis
- Inhibits the DNA replication
- Damage in the proliferative zone (especially in Monolayer structures)



Mode of action:

- Effects hypoxic area with a low O2 concentration
- · Causes single & double strand breaks in DNA
- Reduces DNA synthesis
- Damage in the hypoxic zone (especially in Spheroid structures)

Figure 1. Comparison of mode of action between 5-FU and TPZ.

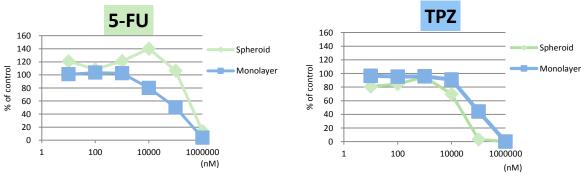


Figure 2. Comparison of Cell viability curve between 5-FU and TPZ

TPZ showed stronger effect in "Spheroid" than "Monolayer".

This experiment suggest 3D drug efficacy test environment could be reproduced with "PrimeSurface".

	Cat. No.	Product Name	Well type	Color	Well bottom	Maximum well	Package
Microplate	MS-9024XZ	PrimeSurface 24 well	24	Clear	Flat (1.8cm²)	3.4 ml	Individual package 10 plates/case
	MS-9096UZ	PrimeSurface 96U	96	Clear	Round	300 μL	Individual package 20 plates/case
	MS-9096WZ	PrimeSurface 96W	96	White	Round	300 μL	Individual package 20 plates/case
	MS-9096MZ	PrimeSurface 96M	96	Clear	Spindle	200 μL	Individual package 20 plates/case
	MS-9096VZ	PrimeSurface 96V	96	Clear	V	300 μL	Individual package 20 plates/case
	MS-9384UZ	PrimeSurface 384U	384	Clear	Round	106 μL	Individual package 20 plates/case
	MS-9384WZ	PrimeSurface 384W	384	White	Round	106 μL	Individual package 20 plates/case
Dish	MS-9035XZ	PrimeSurface dish 35mm	-	Clear	Flat (9cm²)	_	5/package 50/ case
	MS-9060XZ	PrimeSurface dish 60mm	_	Clear	Flat (21cm²)	_	10/package 100/case
	MS-9090XZ	PrimeSurface dish 90mm	-	Clear	Flat (57cm²)	_	10/package 50/case



Necrotic

Drug-Resistant Core

Drug-Sensitive Zone

Quiescent Zone

Proliferating