Low drug adsorption

Drug adsorption to the culture substrate

• Data provided by Dr. Arakawa, Kanazawa University

Drug	log P	clinicalC$_{max}$ (μM)	Residual rate after 24 hours (% vs 0 hours) Drug concentration 100nM			
			PS-plate	FEP-plate	PDMS-plate	InnoCell™ T-plate
Aripiprazole	5.21	0.067	64.2±0.4	54.7±1.2	26.3±0.9	69.9±2.2
Alectinib	5.59	1.4	72.9±1.8	53.7±2.8	45.1±0.8	70.3±2.9
Sorafenib	4.12	17	73.0±1.7	56.4±2.5	59.2±0.4	68.0±3.4
Gefitinib	4.02	0.86	82.9±3.4	69.8±4.3	39.6±2.3	94.0±4.8
Pazopanib	3.59	132	86.7±2.1	59.5±1.8	82.1±2.1	87.8±0.6
Sunitinib	3.24	0.18	95.8±1.9	64.9±1.8	29.0±2.0	97.0±3.5
Ciprofloxacin	0.28	6.73	62.2±5.4	67.7±12.1	59.6±6.7	69.4±13.0

Conditions

[Plate type] InnoCell™ T-plate FP series (flat bottom)
Non-treated (N type)
[Measurement]
Liquid chromatograph-mass spectrometer (LC-MS / MS)

Drug adsorption to InnoCell™ T-plate is low. It can be utilized in toxicity studies, as well as drug efficacy / pharmacology studies during the drug discovery phase.

Drug adsorption to the culture substrate

• Data provided by Dr. Sakai, Dr. Nishikawa, The University of Tokyo
• Reference : Accurate Evaluation of Hepatocyte Metabolisms on a Noble Oxygen-Permeable Material With Low Sorption Characteristics. *Front. Toxicol.*, 4: 810478, (2022).

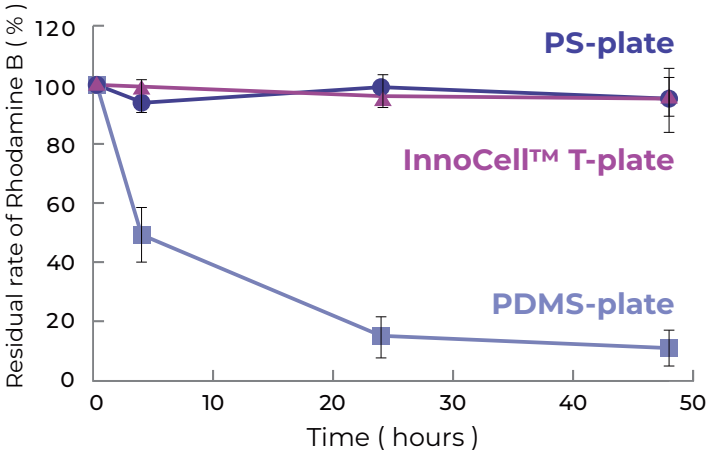
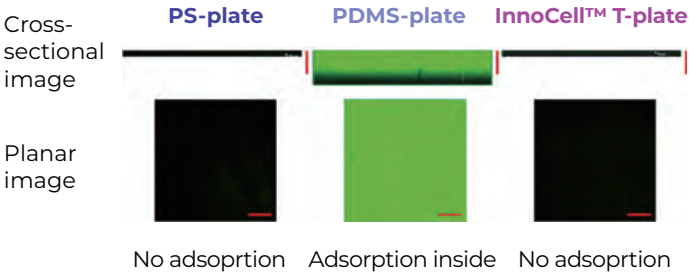


Image after 48 hours (Confocal microscope, 200μm from the bottom)

Rhodamine B



InnoCell™ T-plate is designed for and verified to have low drug adsorption into the culture substrate.

[Abbreviation] • PS : Polystyrene • PDMS : Poly (dimethylsiloxane) • FEP : Fluorinated ethylene-propylene