



## Basic specification

<b>Product name</b>	Micro tube-pump systems	
<b>model number</b>	MTIC05-01	
<b>price</b>	Open price	
<b>Dimensions</b>	Controller W200 x D160 x H41 mm, Base-unit (with driving-units) W205 x D192 x H53 mm	
<b>Power supply</b>	AC adapter : DC Output Rating 12 V, AC Input Rating 100 to 240V	
<b>Serilization</b>	Only base-unit is autoclavable	
<b>System components</b>	Controller (1), Driving-unit (2), MicroUSB cable (2), Base-unit (1), miniUSB cable (1), AC adapter (1) Please prepare a Windows PC.	
<b>Options</b>	<ul style="list-style-type: none"> <li>• Conical tube rack (50mL Size)</li> <li>• Terasaki Holder (Φ35mm Petri Dish Holder, Φ60mm Petri Dish Holder)</li> <li>• Driving-unit ((Maximum 6 driving-units can be connected to controller)</li> <li>• Pump cassette (Consumable)</li> <li>• etc...</li> </ul>	



## Specification of driving unit

<b>Dimensions</b>	W51×D72.7×H30mm	<b>Adaptable tube</b>	Inner Φ0.8 to Φ2.5 mm
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model number	Flow range (μL/min)	Mount up pump cassettes
MTIC06-100-01	75 ~ 2000	1
MTIC06-200-01	5.0 ~ 300	4
MTIC06-300-01	2.5 ~ 100	6
MTIC06-400-01	0.5 ~ 50	6
MTIC06-500-01	0.1 ~ 4.0	6



Pump Cassette



Connectable up to 6 pump-cassettes

※ The design specifications of our products are subject to change without prior notice, if in doubt, please contact the company.



“SAITAS” is an our project that helps regenerative medicine reaserch and industrialization.

[saitas.club](http://saitas.club)

Connectable peristaltic pump-cassettes without tools,

# Micro tube-pump systems



■ Variable flow rate pump. Flow range: 0.1 to 2,000 μL/min

■ Available in CO2 incubator

■ Minimal contamination risk: Autoclavable and disposable Pump Cassette

■ Manufacturer

**ICOMES Icomes Lab Co., Ltd.**  
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TEL +81-19-601-8228 FAX +81-19-601-8227  
E-mail: info@icomes.co.jp URL: https://www.icomes.co.jp/en/

■ Distributor in Japan

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TEL +81-3-5256-1830 FAX +81--5256-1899  
E-mail saitas@ikedarika.co.jp

■ Contact information

SAITAS-MP201906TM-01

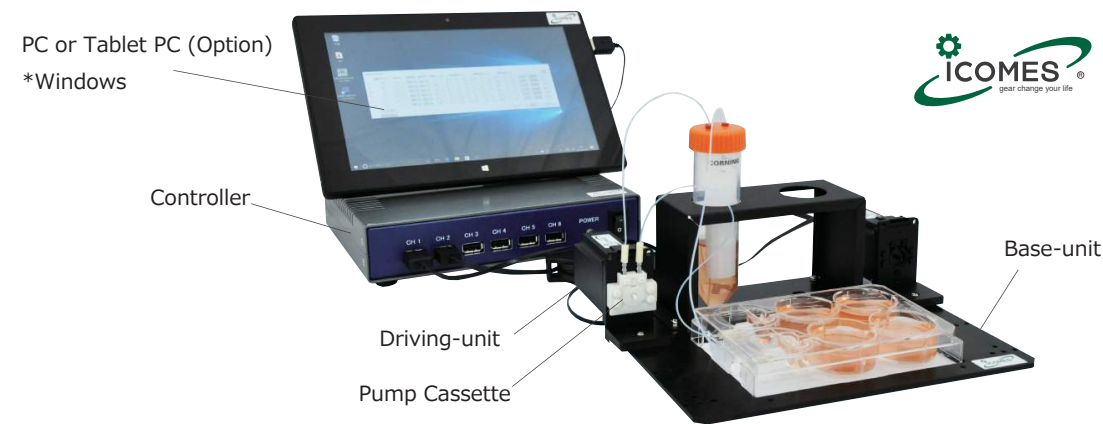
**TMS TOLIMS Co., Ltd.**  
Tohoku Life Science Instruments Marketing and Solutions

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TEL: +81-19-601-8228  
E-mail: katano@tolims.co.jp

# What is "Micro tube-pump systems" ?

Icomes lab Co., Ltd is one of leading suppliers of life-Science and medical pump.  
Micro Tube-pump systems provide flexibility base on your needs and requirements.

## System Components



**1** Customizable depends on your needs

The pump systems can be customized as your needs – Just switch variable parts.



\*optional parts



**2** Various pump lineup

Variable flow-rate:  
Flow-range 0.1 to 2,000  $\mu$ L/min.  
Connectable up to 6 pump-cassettes\*  
with nub-Bricks Feature.

\*The number of cassette varies depends on flow rate.



**3** Sterilizable pump-cassette

Pump cassette is autoclavable and disposable.  
Minimize contamination risks.



\*nub-Bricks Feature

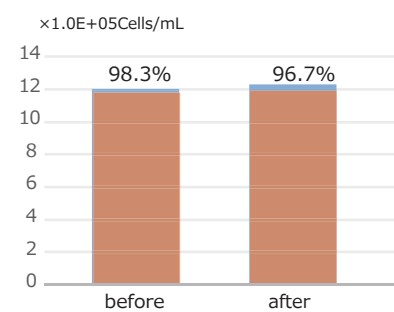
## The pump-cassette for pumping live cells and shear-sensitive fluids – validated by independent test data

### Experimental conditons

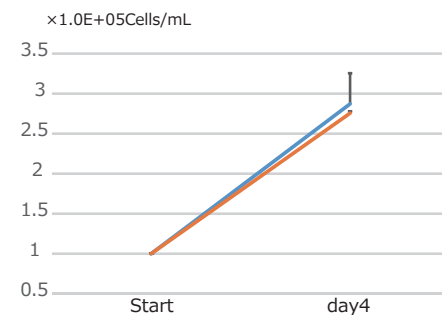
Cell line : NIH/3T3 (passage 3)  
Medium : DMEM  
(10% FBS, 1% Penicillin / Streptomycin)

Flow rate : 2mL/min  
Infusion volume : 1mL

### Viability



### Proliferaion

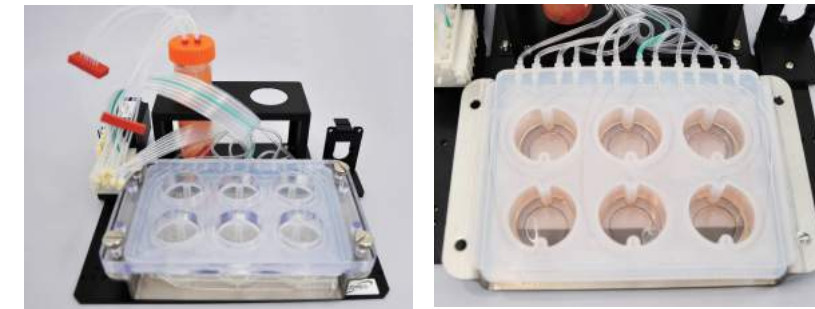


## Applications



### Perfusion Clture for Regenerative medicine research

Connected with Perfusion attachments (iP-TEC Perfusion attachment, Sanplatch Co., Ltd.)

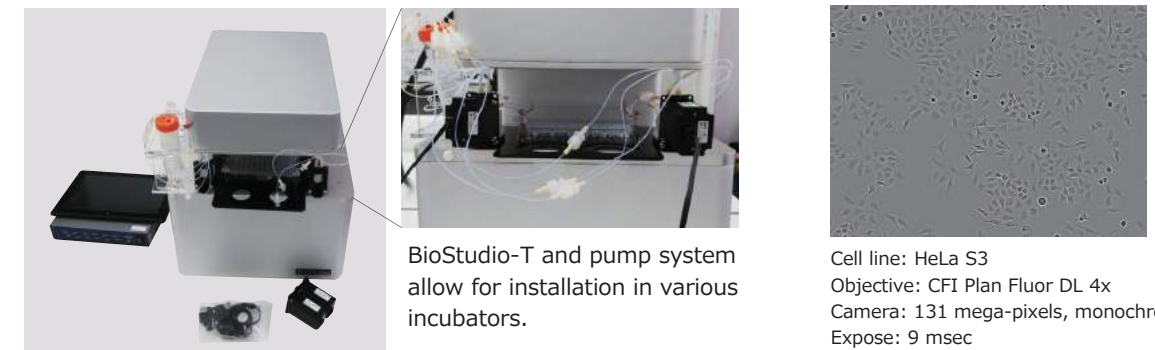


iP-TEC Perfusion attachment can perfuse individual culture-well by single drivig unit with 6 pump cassettes and observe through a microscope.



### Time-lapse imaging for a microscopic observation drug susceptibility assay

Placed on the stage of Time lapse imaging system( BioStudio-T, Nikon Engineering Co., Ltd. )



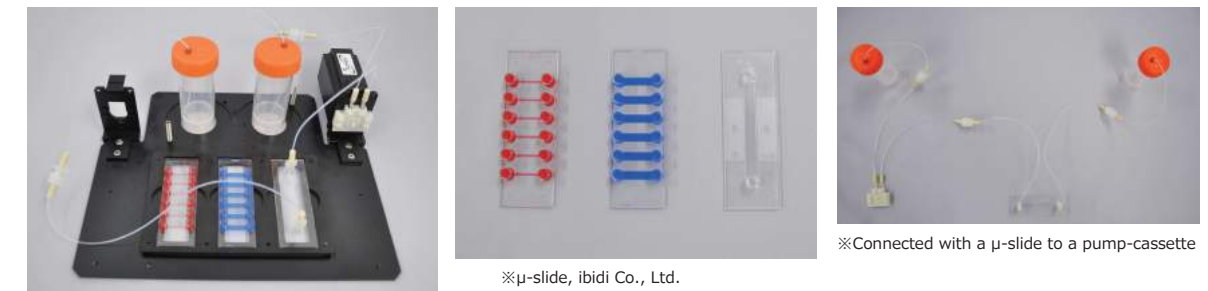
BioStudio-T and pump system allow for installation in various incubators.

Cell line: HeLa S3  
Objective: CFI Plan Fluor DL 4x  
Camera: 131 mega-pixels, monochromatic  
Expose: 9 msec  
Enhance/gain: auto



### Micro physiological Sytem (micro-fluidic cell-culture)

Connected with Microfluidic tip ( $\mu$ -slide, ibidi Co., Ltd.)



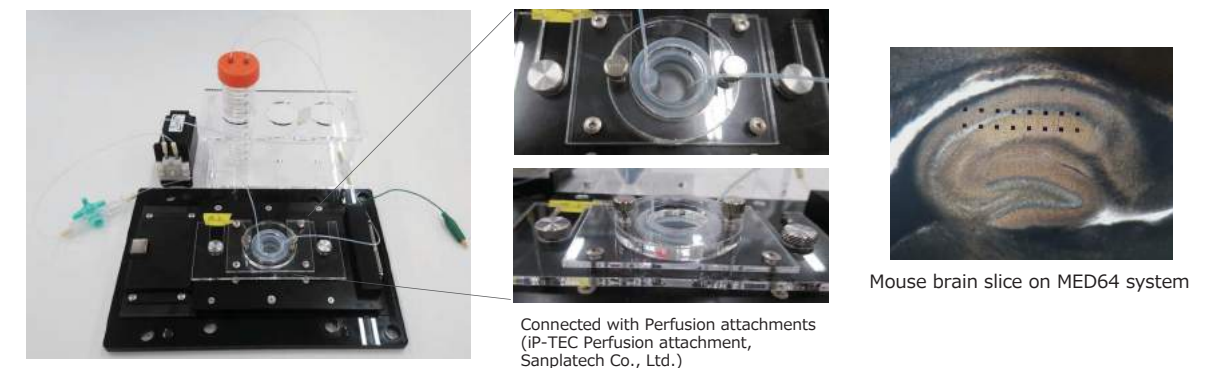
※ $\mu$ -slide, ibidi Co., Ltd.

※Connected with a  $\mu$ -slide to a pump-cassette



### Extracellular potential recording system

Connected with extracellular potential recording system(MED64 system, Alpha MED Scientific Inc.)



Connected with Perfusion attachments (iP-TEC Perfusion attachment, Sanplatch Co., Ltd.)

Mouse brain slice on MED64 system

※Please make inquiries using the help request form.