

Prescyto MG-71C-A/71M-A

Our proprietary technology "Active Gas Ventilation" CO₂/Multi-gas incubator. Optimal for Large scale and Hypoxic culture with Multilayer culture plates

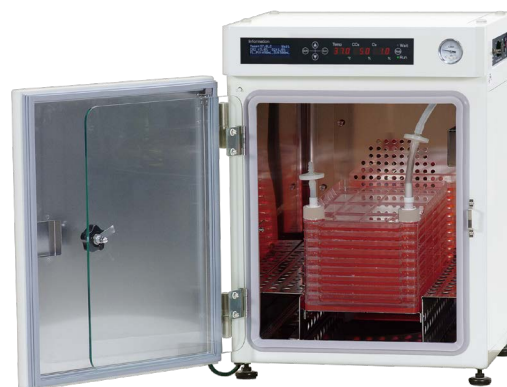
•Shaker for High humidity "CS-LR" that can be inside Chamber --> P.066 •Optional accessories and Related products --> P.050-052

Features

- Excellent Culture efficiency by our proprietary "Active Gas Ventilation"
- Switches Gas cylinders automatically with the Optional "MG-GCH02"
- Stackable up to 2 levels

Applications

- Large scale of iPS cell culture with Multilayer plates
- Large scale and Hypoxic culture of adherent cells with Multilayer plate [71M-A]
- Hypoxic culture of floating cells with Erlenmeyer flasks [71M-A]



MG-71M-A with Multilayer culture plate

Our proprietary technology "Active Gas Ventilation (PAT.P)" Excellent gas replacement efficiency

Forced aeration (AGV = Active Gas Ventilation) is a method in which the gas is directly fed into the culture plate. As this method is better than that of normal gas replacement in efficiency, it should be optimum for Low-oxygenation and Large scale culture of adhesion cells with Multilayer culture plate. Large scale and Hypoxic culture of floating cells can also be done (Shaker and Stirrer required). Thermo Fisher Scientific Cell Factory (AGV type: Up to 10 layers) can be used as Multilayer culture plate.

The effect of Active Gas Ventilation in Large scale culture with Multilayer culture plate

The differences between Normal Gas Ventilation and Active Gas Ventilation visualized in Multilayer culture plate as well as compared to the culture results.

Figure 1 and 2 show the changes in O₂ concentration in Multilayer culture plate. The change was quite slow in which O₂ concentration reached only around 20% in 1 day. In contrast, the change in O₂ concentration by AGV in Figures 3 and 4 made any layers with Hypoxic conditions within 4 hours.

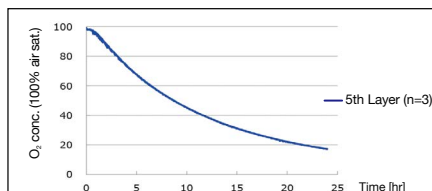


Figure 1. The change in O₂ concentration in Multilayer culture plate by NGV



Figure 2. The change in color by NGV (Captured image, Saturation adjusted)

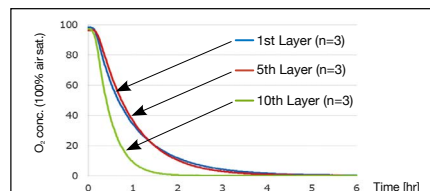


Figure 3. The change in O₂ concentration in Multilayer culture plate by AGV

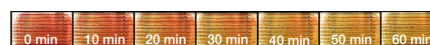


Figure 4. The change in color by AGV (Captured image, Saturation adjusted)

Product name	Active Gas Ventilation CO ₂ incubator	Active Gas Ventilation Multi-gas incubator
Model	MG-71C-A	MG-71M-A
Temperature range/accuracy	5°C above RT to 50°C, ±0.2°C (*1)	
Heating method	Air Jacket type (6 Heaters)	
Gas control range	CO ₂ : 3% to 10% (Set in 0.1%) (*2)	CO ₂ : 3% to 10% (Set in 0.1%) (*2) O ₂ : 1% to 25% (Set in 0.1%) (*3)
Gas flow rate control range	20 to 500 mL/min (set by 1 mL/min)	
Ambient temp. range	+15°C to +35°C	
Inner Dimensions(WxDxH)/Chamber volume	Chamber: 354 × 425 × 418 mm, Approx. 69 L	
Example of Capacity	Up to 10 layers of Multilayer culture plate × 1 pc (*4), Erlenmeyer flask 250 mL × 6	
Other functions	Connection holes (inner dia. φ30 mm)× 2 pcs, Outlet for external supply (Max. 3 A), RS-232C terminal	
Gas connection port	Barbed nozzle φ9 mm (Replaceable: 1/4 Rc)	
Dimensions(WxDxH)/Weight	476 × 578 × 638 mm, Approx. 51 kg	
Standard accessories	Supply tube for Culture (5 m)×1 pc, Gas supply tube (5 m)×1 pc, Hose band× 2 pcs	Supply tube for Culture (5 m)×1 pc, Gas supply tube (10 m)×1 pc, Hose band× 4 pcs
Power supply	AC100V/3.5A/Max.6.5A (Need a step-down transformer)	

(*1)The value at the ambient temperature 25°C and operation temperature 37°C/CO₂ 5%. (*2)Measured by Infrared type CO₂ sensor. (*3)Measured by Zirconia type oxygen sensor. (*4)Please use commercially available Multilayer culture plates that are compatible with forced aeration.

•"Multi-gas" is a specification that controls CO₂ and O₂ Concentration by connecting CO₂ Gas and N₂ Gas or O₂ Gas.

NEW

Constant-temperature incubator/shaker OD Monitor

For cell culture related products

Shaker

Mixer Rotator Stirrer

Bead beater homogenizer Ultrasonic homogenizer

Aluminum block Bath Mini-size Bath

Water bath Spiking Water bath Immersion cooler

Hybridization incubator Constant temperature Chambers

Centrifugal Concentrators Cold Trap

Freeze dryers

Substrate Electrophoresis apparatus Blotting device for hybridization

Constant-temperature water circulating system [Chilled]

Appendix