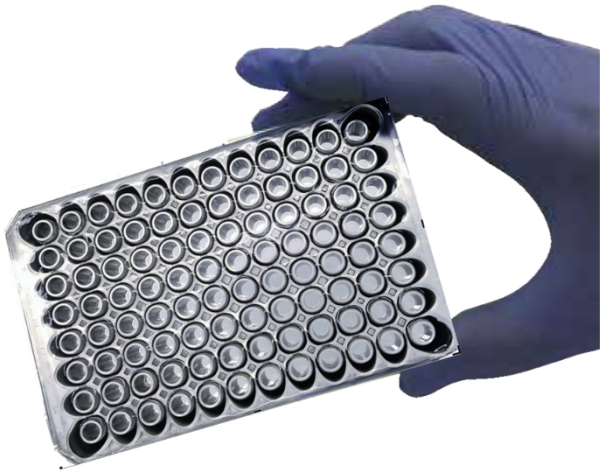
Introducing the next evolutionary step in microplate technology



- **Engineered to eliminate edge effects**
- **Unparalleled microwell environment protection**
- **Unprecedented volume range (10nl to 150µL)**
- **No filling of moats or inter-well spaces**
- **Solid state environmental buffering technology.**
- **Protects cells against Evaporation and fluctuations in Temperature and pH**
- **Patented solid state environmental buffering technology.**
- **Compatible for high resolution microscopy (63X using High NA water immersion lens)**

The BioClime+™ 96 has been created to provide a simple and effective, 96-well microplate that saves time and money improving the reproducibility of experiments.

Engineered to eliminate evaporative edge-effect, the patented design features a solid-state environmental buffering technology that provides unprecedented well-to-well protection against fluctuations in multiple environmental factors.

BioClime+™ 96 Anti-Evaporation Results

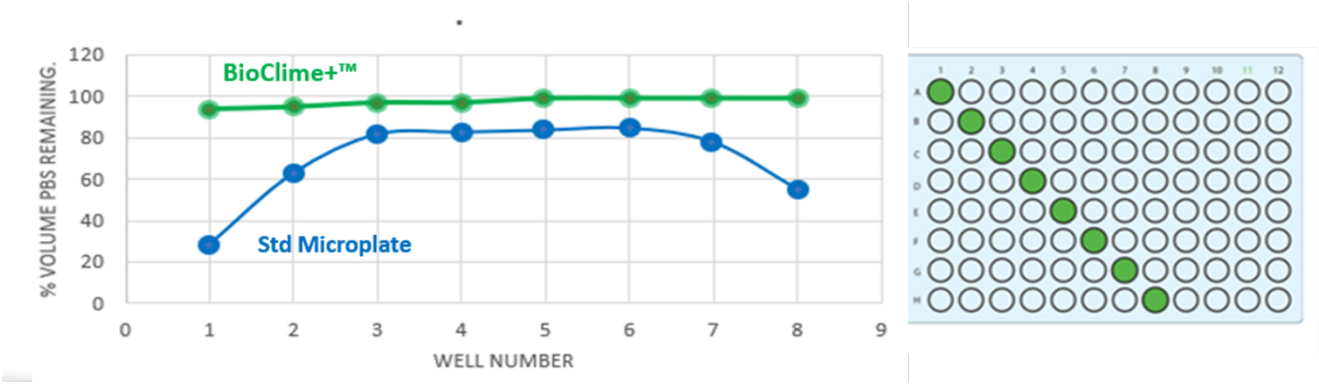
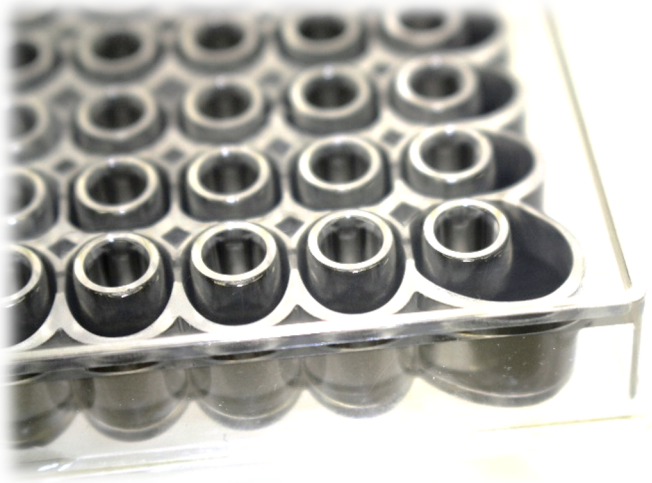


Figure showing experiment to assess the anti-evaporative effects of the buffering gel.

Wells of 96-well plates were filled with 140 ul serum free culture medium and then maintained in a standard drying oven set at 50°C for 48 hours. (Data expressed as a percentage volume remaining after incubation time).



The BioClime+™ 96-well microplate solid state buffering system prevents evaporation even in the most extreme conditions, resulting in minimum media loss and high consistency across wells, even with the lid off.

BioClime+™ 96 - Excellent Thermal Buffering

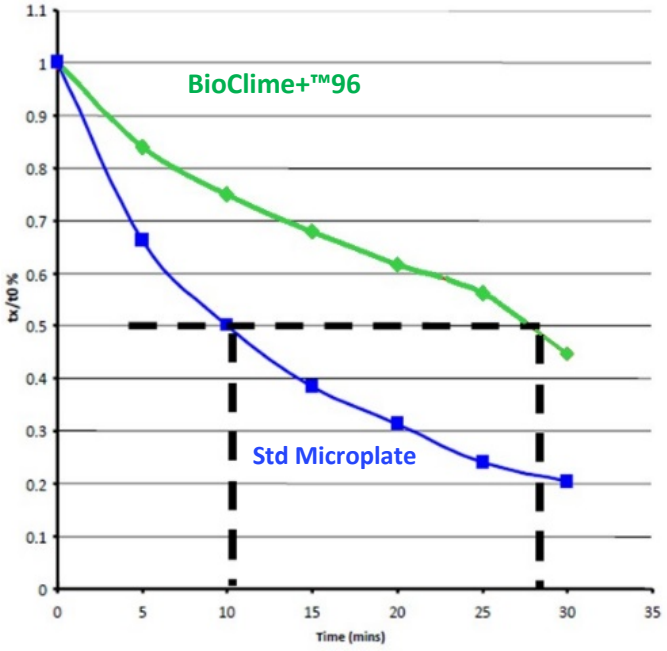


Figure showing results of an experiment where the thermal retention properties of BioClime+™ 96 were compared with a standard microplate.

Reduced Coefficient of variation of cooling

	CV %	
Time (min)	Bioclime +	STD Microplate
T0	0.00	0.00
T5	7.59	6.38
T10	13.84	6.24
T15	19.92	8.44
T20	22.87	10.90

Figure showing the results of an experiment where the coefficient of variation of cooling was compared between BioClime+™96 and standard microplates.

Improved Reproducibilitv and Cell Growth

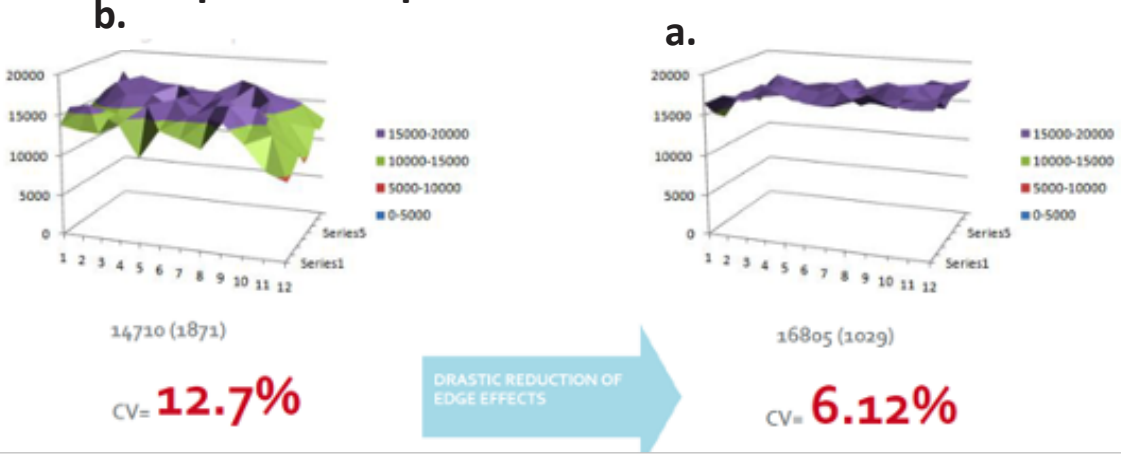
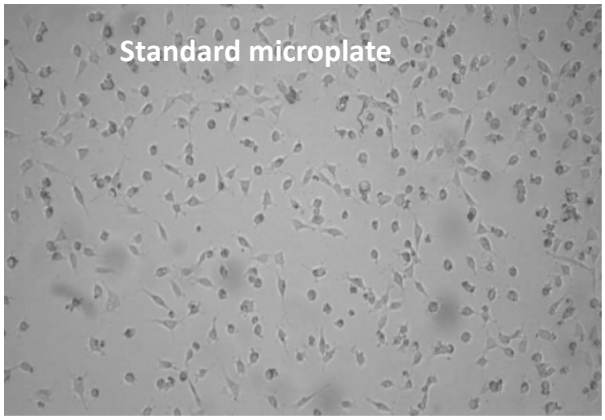
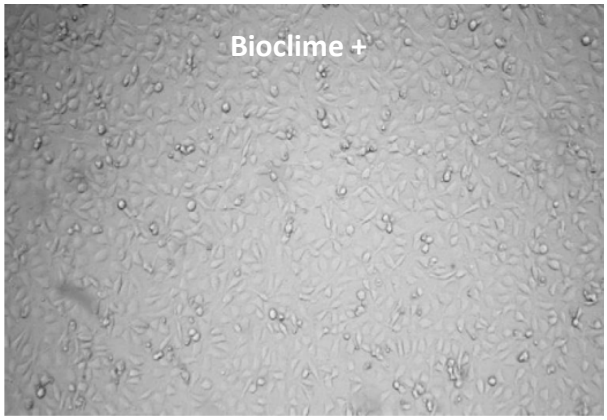


Figure showing Edge Effects on Cell Growth in (a) STD 96 well plates Vs (b) BioClime+™96.

A549 cells were incubated under standard tissue culture conditions (37°C 5% CO2 >95% Relative Humidity) for 7 days. Cells were then stained with the nuclear dye Hoechst, counted and the edge effect coefficient of variation (cv cell number) was determined. BioClime+™96 showed a consistently lower CV than STD microplates.





Photos showing representative images of a comparison of cells seeded into BioClime+™96 vs Standard Microplates – Cells were Imaged at Well Position D6 in both BioClime+™96 and a Standard Microplate

96 well plates were seeded at (equally) low density with cells of immortalised cell line prior to maintenance in a standard tissue culture incubator (set at 37C, 95% air/ 5% CO2) for 48 hours.

Both plates were placed in middle of incubator side by side.

Buffering Gel Technology at Work

When placed in incubator Incubator **When removed from Incubator**

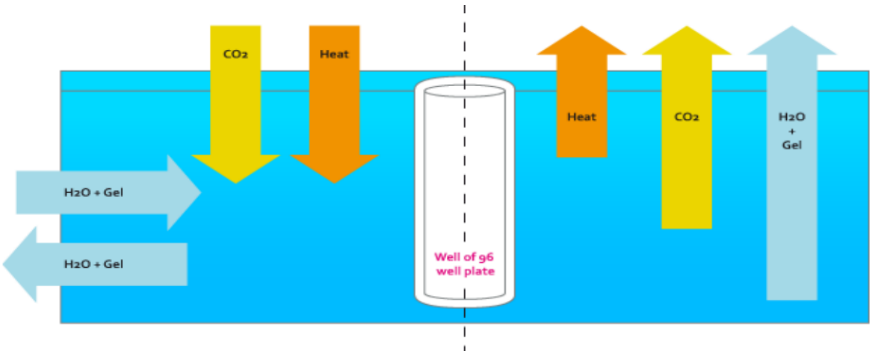


Figure showing the mechanism by which the microplate environment in maintained by patented buffering gel technology.

When placed in the incubator the buffering gel absorbs heat, CO2 and the vapor pressure of water reaches equilibrium with that of the incubator atmosphere.

When the incubator door is opened, or the plate is removed from the controlled environment, the Buffering Gel releases heat, water and CO2 down their respective gradients counteracting any changes in the microplate

Cross section Diagram of Multi well bioreactor plate with gel, lid & base

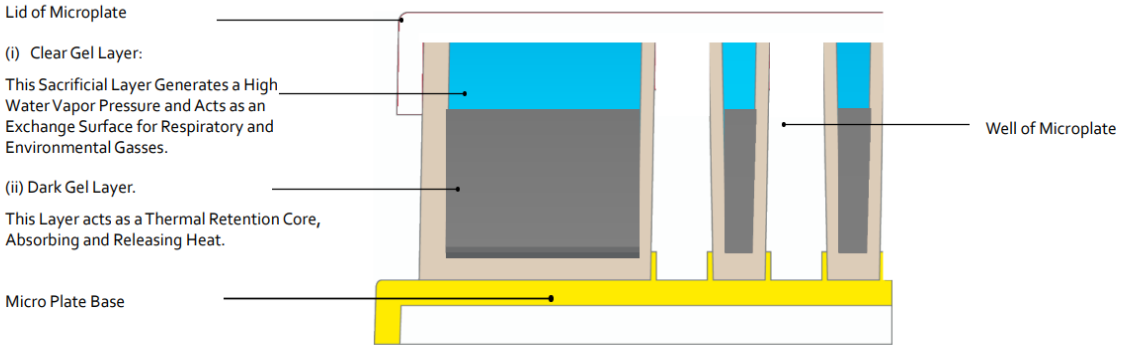


Plate Specifications

Plate	**Clear SBS Format**
Skirt	**SBS format compatible with automation**
Bottom	**Flat bottomed**
Working volume	**10nl - 150µL**
No. Wells	**96**
Packaging	**Individual**
Sterility	**Sterile**
Plate Dimensions	**85.5 (W) x 127.8 (L) x 14 (H)**
Manufacturing Standards	**Manufactured under ISO 13485 (Medical Device standard)**
Storage	**Store at room temperature: 4°C - 28°C and out of direct sunlight**
Material	**Polystyrene - suited to Tissue Culture & Microscopy**
Surface Treatments	**Low attachment, Tissue culture treated, Collagen, Fibronectin, Laminin**

Plate Specifications