



The MIRI® M multiroom incubator has been validated by **Embryotools**, an independent laboratory working under **Good Laboratory Practices (GLP)**. Results show that the MIRI® M delivers **stable, reliable, and equivalent embryo culture conditions** when compared to the benchmark MIRI® incubator, while offering greater flexibility and security for modern IVF laboratories.

This makes the MIRI® M not only a trusted solution for consistent embryo development, but also a **next-generation platform** designed to support your lab's evolving workflows.

## Innovative Modular Design

### Docking Station—18 Fully Independent Chambers

Each chamber powered by its own integrated battery.

### Flexibility During Workflow

Chambers can be undocked for handling or transfer without interrupting embryo culture.

### Proven Stability During Transfers

Study confirmed temperature remained within optimal limits for up to 1 hour when undocked, while pH was maintained within physiological range for at least 30 minutes.

### Battery Backup Security

Engineered for 30 minutes but demonstrated stable culture conditions up to 60 minutes.



## Proven Embryo Development Outcomes

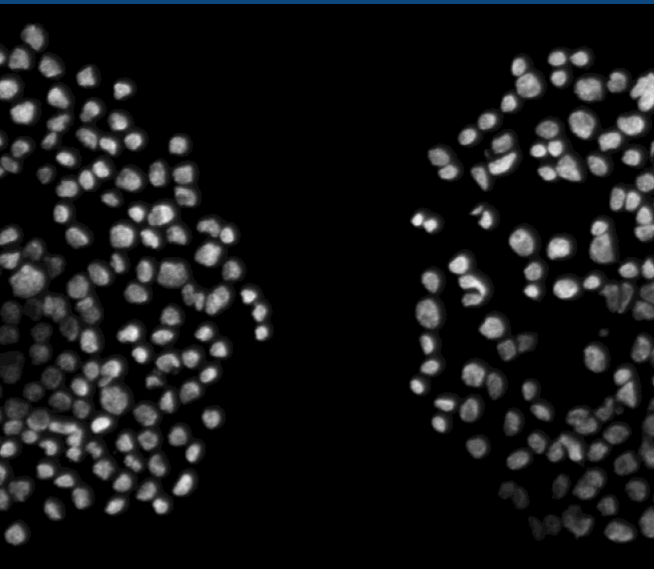
**Cleavage Rates:** 99 – 100% (mouse model)

**Blastocyst Formation:** 95–96% (Day 5/6)

**Embryo Quality:** ~90% blastocysts graded as good morphological quality\*

**Total Cell Counts:** Stable across all 18 chambers, matching results from the conventional MIRI® incubator

\*A total of 438 embryos were cultured *in-vitro*, 378 corresponding to the test group and 60 to the control group.



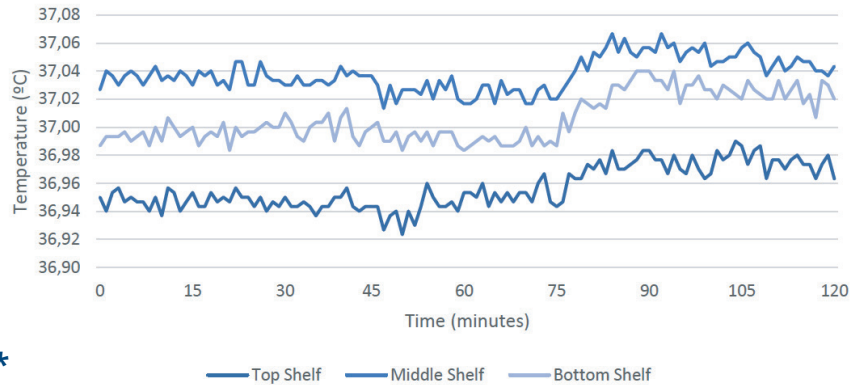
## Stable & Reliable Environmental Control

### Temperature Stability

Ultra-stable under normal conditions, both during docking or undocking, with minimal fluctuations ( $\leq 0.15^\circ\text{C}$ ).

### Temperature Recovery

Rapid recovery within ~5 minutes after repeated door openings, docked or relocated, with deviations always within acceptable limits ( $\pm 0.5^\circ\text{C}$ ).\*



### Resilience

Withstood overnight AC failure (+6 °C room rise, reaching 30°C) with an average chamber change of only 0.12 °C.

### Power Failure

Only ~0.1 °C fluctuation during a 30-minute power off, with full recovery in 1 hour.

### pH Stability

Maintained 7.2–7.4 across all conditions, including during undocking and repeated door openings, with stable gas-phase control and minimal CO<sub>2</sub> loss for at least 30 minutes.

### Humidity & Osmolality

Steady and within optimal ranges, ensuring consistent embryo protection.

**\*Reference:** Cohen, J., Mortimer, D., Mortimer, S., Fawzy, M., Alkani, M., Campbell, A., Catt, J., Janssens, R., Mansour, R., Mastenbroek, S., Meintjes, M., Morbeck, D. E., Racowsky, C., Rieger, D., & Swain, J. (2019). Cairo Consensus Guidelines on IVF Culture Conditions: There is only one thing that is truly important in an IVF laboratory: everything. *Reproductive Biomedicine Online*, 40(1), 33–60.

## The Future-Ready IVF Solution

With validated performance in embryo development and robust stability under both routine and extreme conditions, the **MIRI® M** is more than just an incubator—it's a flexible, reliable, and future-proof partner for modern IVF laboratories.