



Modular Incubator Chamber

Create a stable **hypoxic** environment

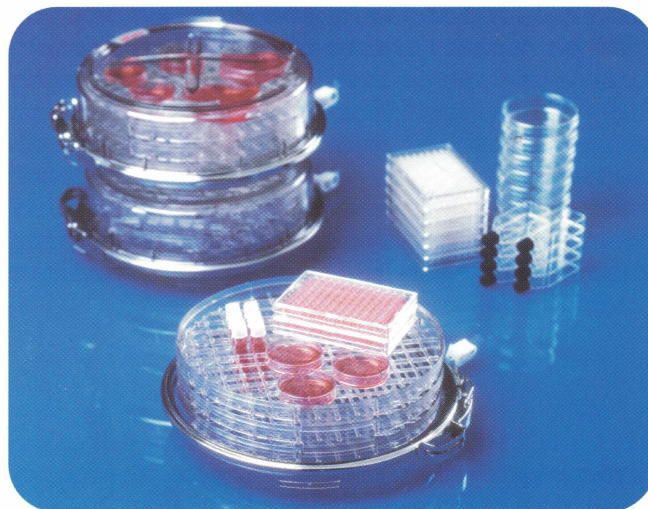
Modular Incubator Chamber (M.I.C. - 101™) is a compact and versatile incubator that can be used for all types of tissue culture work. It is continually tested, daily in thousands of laboratories throughout the world. Its versatility is such that it is used by a wide-range of labs. Critical *in vitro* fertilization procedures and creating hypoxic environments for stem cell propagation and differentiation are but two of its many uses.

Uses:

in vitro Fertilization
Hypoxia/Hyperoxia
Stem Cell Propagation/Differentiation
Cryopreservation
Transgenics
[³⁵S]-Met/Cys Containment

Features:

- It is manufactured from high test polycarbonate and individually tested for o-ring seal leakage. The use of clear polycarbonate allows visual observation of cultures without breaking the incubator's seal.
- Chambers can be stacked and interlocked for agitation storage and to conserve space in continuous flow CO₂ incubators.
- Multiple-purpose trays conveniently hold petri dishes, test tubes, tissue culture flasks, micro-culture plates, etc.
- Lid and Marman clamp design allow easy access to experiments.
- All components are nontoxic and can be alcohol-sterilized.
- The inside of the chamber offers a seamless, crevice-free interior with rolled corners to ensure easy cleaning and decontamination.
- Cylindrical geometry of chamber provides excellent gas distribution.



- Reliable airtight seal.
- Easy to use. Simply flush unit with desired gas mixture, seal and place in controlled temperature environment.
- Versatile. Each M.I.C.-101™ is a self-contained incubator enabling the investigator to easily and economically create the tissue culture environment of choice. Gas concentrations, humidity and temperature can be tailored to fit experimental needs.
- Edge Effect. Repeated measurements of evaporation of short term (96 hr. or less) micro cultures were placed in continuous flow CO₂ incubators, revealed evaporation losses in outside wells exceeding 15%. In fact, losses were over 25% in corner wells. CAUTION: The outside wells of these plates are being exposed to dramatic changes in pH, nutrient and salt concentrations. When parallel experiments were carried out in the M.I.C.-101, the evaporation was less than 1% which is within experiment error. The MIC-101 is guaranteed to eliminate the, "Edge Effect."

References:

- IVF Protocol. The Cryopreservation Laboratory at the Jackson Laboratory. www.jax.org/resources/documents/cryo/ivf.html
- Studer L, Csete M, Lee SH, Kabbani N, Walikonis J, Wold B, McKay R. 1: J Neurosci. 2000 Oct; 20(19):7377-83