

## CLINicell® Specifications

**Description :** Fully closed and secured cell culture system intended to ensure the safety of both cell culture and manipulator in a controlled sterile environment. The rigid frame makes the handling easier and increase the manipulation safety. **CLINicell®** are stackable to provide economy in incubators.

**Applications :**

- ❖ Expansion of hematopoietic progenitors and stem cells,
- ❖ Production of dendritic cells from monocytes and from CD34<sup>+</sup> cells,
- ❖ Selection and expansion of mesenchymal stem cells,
- ❖ Culture of hybridoma and production of antibodies,
- ❖ Culture of immortal cell lines...

Please contact the TECHNICAL INFORMATIONS service for specific informations related to your needs.

**Dimensions :** **CLINicell® 25** – 97 mm x 72 mm x 12 mm,  
**CLINicell® 250** – 250 mm x 175 mm x 16 mm.

**Culture area :** **CLINicell® 25** – 25 cm<sup>2</sup> x 2,  
**CLINicell® 250** – 250 cm<sup>2</sup> x 2.

**Volume :** **CLINicell® 25** – 5 ml to 10 ml,  
**CLINicell® 250** – 80 ml to 160 ml.

**Materials :** Polycarbonate rigid frame, gas permeable polycarbonate films.

Totally flat and transparent, the polycarbonate films are treated for cell culture and allow an excellent observation under optical microscopes.

**Gas Transfer Rate\* :**







Air	85 ml/mil/100 in <sup>2</sup> /24 hr/atm
Nitrogen	50 ml/mil/100 in <sup>2</sup> /24 hr/atm
Oxygen	300 ml/mil/100 in <sup>2</sup> /24 hr/atm
Carbon Dioxide	1.075 ml/mil/100 in <sup>2</sup> /24 hr/atm

**Connections :** All types of systems with “Luer Lock” standard connections (syringes, filters...). The **CLINicell® 250** has an injection site.

**CLINicell®** may be connected in parallel or series, together and to other systems such as bags and **CELLPerf®**, to allow different perfusion options.

**User instructions :** Available, in French or in English, in PDF format downloadable from website [www.mabio.net](http://www.mabio.net)

**Symbols :**

	Warning, see the joined documents
	Irradiation sterilized
	Do not reuse
	Batch number
	Expiry date
	CE Mark by KEMA medical n°: 2111774CE01

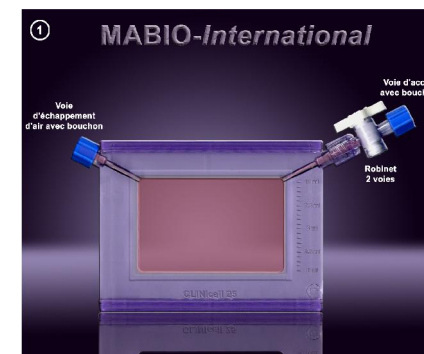
\* data provided by the manufacturer



## CLINicell® 25

### Medical Device

**Sterile single use cell culture cassette.**



## User Instructions

**Please read this user manual prior to any manipulation**

**For additional information to assist manipulation of our products, please contact :**

Tel : +33 (0)320 234 196 Fax : +33 (0)320 234 086 E-mail : [mabio@mabio.net](mailto:mabio@mabio.net)

### I. Storage precautions:

Store in a clean, dry and dark location and at room temperature.

### II. Handling precautions:

- a- Do not use **CLINicell®** if it is damaged. Do not reuse. Always verify packaging integrity. We guarantee **CLINicell®** sterility if packaging is unopened and intact.
- b- Manipulate **CLINicell®** in a sterile environment.  
Avoid contact between the access ports and your hands or the flow hood working surface. Check that all the ways are closed or connected before getting **CLINicell®** out of the flow hood.
- c- Before any manipulation, check that the stopcock connection (1) is secured and ensure the stopcock is closed.
- d- For any manipulation (injection or extraction of fluids) always open the ventilation port to avoid overpressure inside the **CLINicell®**.
- e- We suggest to use “Luer Lock” syringe, as this allows the syringe to securely screw to the access port.
- f- For safety, we recommend to use blunt-end needles to aspirate solutions with the syringe.
- g- To limit the contamination risks when you remove the syringe from the access port, always create a forced vacuum to draw any residual liquid remaining in the port end.

## Manipulation of the **CLINicell® 25** Culture Cassette

We recommend to prepare the cell suspension within the optimal volume of medium (10 ml) and to inject this cell suspension into the **CLINicell®**.

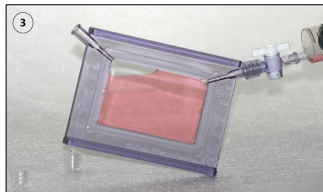
For high concentration cultures (from  $1.10^6$  cells/ml) of non-adherent cells, we recommend to re-suspend the cells each two days. Gently agitate or tap on the rigid frame of the **CLINicell®**.

### Filling the **CLINicell® 25**

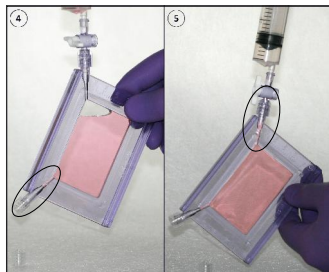
- 1.) Check that the stopcock connection (1) is secured and ensure it is closed.



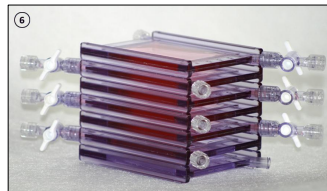
- 2.a) Prepare the cell suspension in the optimal volume of medium (10 ml),
- 2.b) Stand the **CLINicell®** vertically,
- 2.c) Remove both caps,
- 2.d) Take the cell suspension using a 20 ml syringe containing about 3 ml of air (2).



- 3.a) Connect the syringe to the access port and open the stopcock,
- 3.b) Inject the suspension (lift carefully the **CLINicell®** so that the ventilation port rises up),
- 3.c) Inject contained air in the syringe to push the suspension present in the stopcock (3).



- 4.) Tilt gently the **CLINicell®** so that the access point is raised up till the suspension slightly goes in the air exit port and screw its cap (4),
- 5.) Extract the residual air contained in the cassette and close the stopcock (5), then create a forced vacuum with the syringe and disconnect it from the access port.



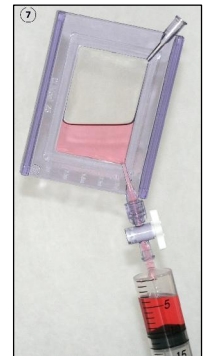
- 6.) Screw the access port cap and incubate the **CLINicell®** (6).

### Recovery of non-adherent cells

- 1.) Re-suspend the cells, gently agitate or gently tap on the rigid frame of the **CLINicell®**.
- 2.) Stand the **CLINicell®** vertically (1).
- 3.) Ensure the stopcock is closed and remove the access port cap.
- 4.) Connect a 20 ml syringe to the access port and open the stopcock.
- 5.) Remove the ventilation port cap.
- 6.) Take the **CLINicell®** in your hand to ensure that the ventilation port is raised up and aspirate the cell suspension (7)
- 7.) Secure the ventilation port cap and close the stopcock.
- 8.) Disconnect the syringe (create a forced vacuum) and secure the access port cap.

## Recommended washing procedure following cell recovery

- 1.) Stand the **CLINicell®** vertically (1),
- 2.) Ensure the stopcock is closed and remove the access port cap.
- 3.) Connect a 10 ml syringe containing the washing solution (e.g. 5 ml of PBS) and 2-3 ml of air and open the stopcock.
- 4.) Remove the ventilation port cap and inject the washing solution. During the injection, lift the **CLINicell®** so that the ventilation port is raised up to allow air to escape.
- 5.) Secure the ventilation port cap and gently agitate the **CLINicell®**.
- 6.) Stand the **CLINicell®** vertically and remove the ventilation port cap
- 7.) Take the **CLINicell®** in your hand to ensure the ventilation port is raised (pointing up), and aspirate the washing solution
- 8.) Replace the ventilation port cap and close the stopcock.
- 9.) Disconnect the syringe (create a forced vacuum) and secure the access port cap.



### Recovery of adherent cells

- 1.) Stand the **CLINicell®** vertically (1).
- 2.) Ensure the stopcock is closed and remove the access port cap.
- 3.) Connect a 20 ml syringe to the access port, open the stopcock and remove the ventilation port cap
- 4.) Take the **CLINicell®** in your hand to ensure the ventilation port is raised up and aspirate the supernatant (7).
- 5.) Close the stopcock and disconnect the syringe (create a forced vacuum).
- 6.) Refer to the washing procedure as explained in the previous section.
- 7.) Stand the **CLINicell®** vertically (1).
- 8.) Connect to the access port a 10 ml syringe containing the dissociation solution (e.g. 3 ml of trypsin /EDTA) and 2-3 ml of air.
- 9.) Open the stopcock, remove and inject the dissociation solution.
- 10.) Replace the ventilation port cap and close the stopcock.
- 11.) Disconnect the syringe (create a forced vacuum) and secure the access port cap.
- 12.) Gently agitate the **CLINicell®** to homogenize the repartition of the solution.
- 13.) If necessary, incubate at 37°C.
- 14.) Stand the **CLINicell®** vertically (1).
- 15.) Connect to the access port a 10 ml syringe containing the medium (or another solution) used to stop the dissociation reaction and 2-3 ml of air.
- 16.) Open the stopcock and remove the ventilation port cap.
- 17.) Lift the syringe and inject the medium.
- 18.) Replace the ventilation port cap and gently agitate the **CLINicell®** to homogenize.
- 19.) Stand the **CLINicell®** vertically (1) and remove the ventilation port cap.
- 20.) Take the **CLINicell®** in your hand to ensure the ventilation port is raised up and aspirate the suspension (7).
- 21.) Secure the ventilation port cap and close the stopcock.
- 22.) Disconnect the syringe (create a forced vacuum) and secure the access port cap.
- 23.) If necessary, refer to the washing procedure as explained in the previous section
- 24.) Throw the used **CLINicell®** in an appropriate bin.