

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

### I. Storage precautions :

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

### II. Handling precautions :

- a- **Do not use CLINicell<sup>®</sup> if it is damaged. Do not reuse.**  
Always verify packaging integrity. We guarantee **CLINicell<sup>®</sup>** sterility if packaging is unopened and intact.
- b- **Manipulate CLINicell<sup>®</sup> in a sterile environment.**  
Avoid contact between the access ports and your hands or the flow hood working surface. Check all the ways are closed or connected before getting **CLINicell<sup>®</sup>** out of the flow hood.
- c- Before any manipulation, check the stopcock connection (image 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 within **CLINicell<sup>®</sup>**.
- e- We suggest using “Luer Lock” syringe, as this allows the syringe to securely screw to the access port.
- f- For safety, we recommend using 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<sup>®</sup>** 25 Culture Cassette

## Recommendations:

- We recommend to prepare the cell suspension within the optimal volume of medium (10 ml) and to inject this cell suspension into the **CLINicell<sup>®</sup>**.
- 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 gently tap on the rigid frame of the **CLINicell<sup>®</sup>**.

## Filling of the **CLINicell<sup>®</sup>** 25 Culture Cassette

1. Check the stopcock connection (image 1) is secured and ensure the stopcock is closed.
2. Prepare the cell suspension in the optimal volume of medium (10 ml).
3. Stand the **CLINicell<sup>®</sup>** vertically to allow access to both ports directed to the top (image 1).
4. Remove both caps.
5. Take the cell suspension using a 20 ml syringe containing about 5 ml of air. (Once the suspension has been injected, the air will ensure in-flowing cell suspension remaining in the access way).
6. Connect the syringe to the access port.
7. Open the stopcock.
8. Lift the syringe to inject the cell suspension down into the access port (image 2, lift the **CLINicell<sup>®</sup>** so that the ventilation port is raised to allow air to escape).
9. Once the cell suspension has been injected, inject the air until the suspension slightly get in the ventilation way and secure the ventilation port cap.
10. Raise the syringe and access port, extract the residual air from the **CLINicell<sup>®</sup>** and close the stopcock.
11. Create a forced vacuum with the syringe and disconnect it from the access port.
12. Secure the access port cap.
13. Incubate the **CLINicell<sup>®</sup>**.

## Recovery of non-adherent cells

1. Re-suspend the cells, gently agitate or gently tap on the rigid frame.
2. Stand the **CLINicell**<sup>®</sup> vertically to allow access to both ports directed to the top (image 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 the ventilation port is raised (pointing up) (image 3) and aspirate the cell suspension.
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 recovery of culture from the **CLINicell**<sup>®</sup> 25

1. Stand the **CLINicell**<sup>®</sup> vertically to allow access to both ports directed to the top (image 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.
4. Open the stopcock.
5. Remove the ventilation port cap.
6. Lift the syringe to inject the washing solution down into the access port (image 2, lift the **CLINicell**<sup>®</sup> so that the ventilation port is raised to allow air to escape).
7. Secure the ventilation port cap and gently agitate the **CLINicell**<sup>®</sup>.
8. Stand the **CLINicell**<sup>®</sup> vertically (image 1) and remove the ventilation port cap.
9. Take the **CLINicell**<sup>®</sup> in your hand to ensure the ventilation port is raised (pointing up) (image 3), and aspirate the washing 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.

## Recovery of adherent cells

1. Stand the **CLINicell**<sup>®</sup> vertically to allow access to both ports directed to the top (image 1).
2. Ensure the stopcock is closed and remove the access port cap.
3. Connect a 20 ml syringe, open the stopcock and remove the ventilation port cap.
4. Take the **CLINicell**<sup>®</sup> in your hand to ensure the ventilation port is raised (pointing up) (image 3) and aspirate the supernatant.
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**<sup>®</sup> vertically to allow access to both ports directed to the top (image 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 and inject the dissociation solution (image 2).
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**<sup>®</sup> to homogenize the repartition of the solution.
13. If necessary, incubate at 37°C.
14. Stand the **CLINicell**<sup>®</sup> vertically (image 1) and remove the access port cap.
15. Connect to the access port a 10 ml syringe containing the medium (or an other 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 (image 2).
18. Replace the ventilation port cap and gently agitate the **CLINicell**<sup>®</sup> to homogenize.
19. Stand the **CLINicell**<sup>®</sup> vertically (image 1) and remove the ventilation port cap.
20. Take the **CLINicell**<sup>®</sup> in your hand (image 3) and aspirate the suspension.
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**<sup>®</sup> in an appropriate bin.

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

**TECHNICAL INFORMATION Service**

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# CLINicell<sup>®</sup> Specifications

**Description :** Fully closed and secure 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<sup>®</sup> are stackable to provide economy with incubator storage.

**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<sup>®</sup> 25 – 97 mm x 72 mm x 12 mm,  
CLINicell<sup>®</sup> 250 – 250 mm x 175 mm x 16 mm.

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

**Volume :** CLINicell<sup>®</sup> 25 – 5 ml to 10 ml,  
CLINicell<sup>®</sup> 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\* :**

(films)	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<sup>®</sup> 250 has an injection site.  
CLINicell<sup>®</sup> may be connected in parallel or series, together and to other systems such as bags and CELLPerf<sup>®</sup>, 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 n°: 4448.01.

\* Values provided by the supplier