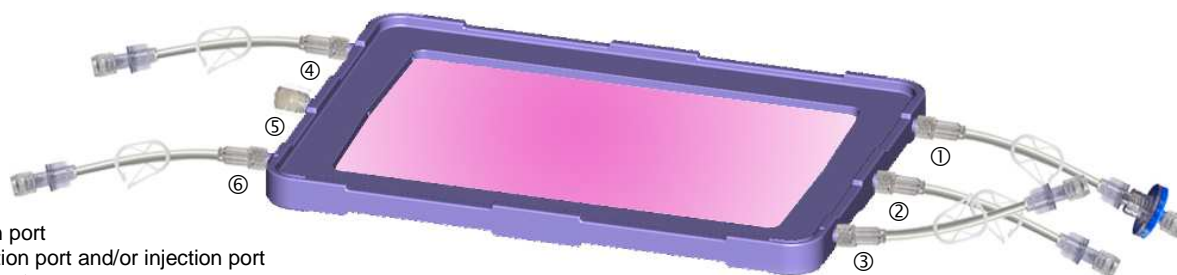


CLINicell[®] 250

Sterile single use cell culture cassette



- ① ventilation port
- ② air extraction port and/or injection port
- ③ injection port
- ④,⑥ extraction ports
- ⑤ injection site latex free

User Instructions.

Warning : 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[®] 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 all the ways are closed or connected before getting CLINicell[®] out of the flow hood.
- c - Check the clamps are closed before removing the caps.
- d - For any manipulation (injection or extraction of fluids) always open the ventilation port ① to avoid overpressure within CLINicell[®]. Be careful not to wet the filter.
- 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 an injection/extraction port, always create a forced vacuum to draw any residual liquid remaining in the port end.

Manipulation of the **CLINicell[®]** 250 Culture Cassette

Recommendations :

- We recommend to prepare the cell suspension within the optimal volume of medium (125 ml) and to inject the whole 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 the **CLINicell[®]** or gently tap on the rigid frame.

Filling of the **CLINicell[®]** 250 Culture Cassette

1. Close all the clamps.
2. Prepare the cell suspension in the optimal volume of medium (125 ml)
3. Hold the **CLINicell[®]** vertically, the injection port ③ directed to the top.
4. Remove the caps from the ventilation ③ and injection ① ports.
5. Take the cell suspension using a 50 ml syringe containing about 10 ml of air. (Once the suspension has been injected, the air will ensure in-flowing cell suspension remaining in the injection way.)
6. Connect the syringe to the injection port ③.
7. Open the injection ③ and ventilation ① port clamps.
8. Lift the syringe to inject the cell suspension down into the injection port ③.
9. Close the injection ③ and ventilation ① port clamps and remove the syringe (create a forced vacuum).
10. Repeat steps 5 to 9 to fill the cassette with 125 ml of cell suspension (whilst injecting the cell suspension ensure the ventilation port ① is raised to allow air to escape the system).
11. Once the cell suspension has been injected, close the ventilation port ① clamp and secure the cap.
12. Close the injection port ③ clamp, remove the syringe (create a forced vacuum) and secure the cap.
13. Remove air extraction ② port cap, connect the syringe and open the clamp.
14. Raise the **CLINicell[®]** vertically, aspirate the residual air from cassette letting the way empty, and close the clamp.
15. Remove the syringe (create a forced vacuum) and secure the air extraction port ② cap.
16. Incubate the **CLINicell[®]**.

Recovery of non-adherent cells

1. Check all the clamps are closed.
2. Re-suspend the cells, gently agitate the **CLINicell[®]** or gently tap on the rigid frame.
3. Hold the **CLINicell[®]** vertically, the ventilation port ① directed to the top.
4. Remove the ventilation port ① and the extraction port ⑥ caps.
5. Connect a 50 ml syringe to the extraction port ⑥.
6. Open the ventilation port ① and extraction port ⑥ clamps.
7. Aspirate the cell suspension (ensure the ventilation port ① is raised enough to allow air to get into the system).
8. Close the ventilation port ① and extraction port ⑥ clamps.
9. Disconnect the syringe (create a forced vacuum) and recover the cell suspension.
10. Repeat steps 5 to 9 to recover the total cell suspension.
11. Close the ventilation port ① clamp and secure the cap.
12. Close the extraction port ⑥ clamp, disconnect the syringe (create a forced vacuum) and replace the cap.

Recommended washing procedure following recovery of culture from your **CLINicell[®] 250**

1. Hold the **CLINicell[®]** vertically, the injection port ③ directed to the top.
2. Check all the clamps are closed and remove the caps from the ventilation port ① and injection port ③.
3. Connect a 50 ml syringe, containing the washing solution (e.g. 20 ml of PBS) and 10 ml of air, to the injection port ③.
4. Open the ventilation port ① and the injection port ③ clamps.
5. Lift the syringe vertically and inject the washing solution.
6. Close the ventilation port ① clamp and gently agitate the **CLINicell[®]**.
7. Hold the **CLINicell[®]**, ventilation port ① directed to the top, and open the clamp.
8. Ensure the ventilation port ① is raised enough to allow air to get into the **CLINicell[®]** and aspirate the washing solution.
9. Close the ventilation port ① clamp and secure the cap.
10. Close the injection port ③ clamp, disconnect the syringe (create a forced vacuum), recover the washing solution and replace the cap.

Recovery of adherent cells

1. Check all the clamps are closed.
2. Hold the **CLINicell**[®] vertically, the ventilation port ① directed to the top.
3. Remove the ventilation port ① and the extraction port ⑥ caps.
4. Connect a 50 ml syringe to the extraction port ⑥.
5. Open the extraction port ⑥ and the ventilation port ① clamps.
6. Ensure the ventilation port ① is raised enough to allow air to get into the **CLINicell**[®] and aspirate the supernatant.
7. Close the extraction port ⑥ and ventilation port ① clamps.
8. Disconnect the syringe (create a forced vacuum) and recover the supernatant.
9. Repeat steps 4 to 8 as necessary.
10. Wash the **CLINicell**[®] once or twice (refer to the washing procedure as explained in the previous section).
11. Remove the ventilation port ① and injection port ③ caps. (if necessary)
12. Connect to the injection port ③ a 20 ml syringe containing the dissociation solution (e.g. 10 ml of trypsin /EDTA) and 10 ml of air.
13. Open the ventilation port ① and injection ③ port clamps.
14. Lift the syringe vertically and inject the dissociation solution.
15. Close the ventilation port ① clamp and secure the cap.
16. Close the injection port ③ clamp, disconnect the syringe (create a forced vacuum) and secure the cap.
17. Gently agitate the **CLINicell**[®] to homogenise the repartition of the solution.
18. Incubate at 37°C if necessary.
19. Hold the **CLINicell**[®] vertically, the ventilation port ① directed to the top.
20. Remove the ventilation port ① and injection port ③ caps.
21. Connect to the injection port ③ a 50 ml syringe containing the medium (or an other solution) used to stop the dissociation reaction and 10 ml of air.
22. Open the injection port ③ and ventilation port ① clamps.
23. Lift the syringe vertically and inject the medium.
24. Close the ventilation port ① clamp and gently agitate the **CLINicell**[®] to homogenise.
25. Open the ventilation port ① clamp.
26. Aspirate the whole suspension ensuring the ventilation port ① is raised enough to allow air to get into the **CLINicell**[®].
27. Close the ventilation port ① clamp and replace the cap.
28. Close the injection port ③ clamp, disconnect the syringe (create a forced vacuum), recover the cell suspension and secure the cap.
29. If necessary, wash the **CLINicell**[®] once or twice (Refer to the washing procedure as explained in the previous section).
30. Throw the used **CLINicell**[®] in an appropriate bin.

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

TECHNICAL INFORMATION Service

France : 03 20 23 41 97

Fax. : 33 (0)3 20 23 40 86

International : 33 320 234 194

e-mail : techintel@mabio.net

CLINicell[®] 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[®] 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⁺ 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 cm² x 2,
CLINicell[®] 250 – 250 cm² 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* :

| | | |
|---------|----------------|---|
| (films) | Air | 85 ml/mil/100 in ² /24 hr/atm |
| | Nitrogen | 50 ml/mil/100 in ² /24 hr/atm |
| | Oxygen | 300 ml/mil/100 in ² /24 hr/atm |
| | Carbon Dioxide | 1.075 ml/mil/100 in ² /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


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