



General FAQs

Cell Culture Questionnaires

1. What types of cells can CellCor™ CD/SFD MSC culture?

- Adipose-derived (AD)-MSCs, Bone Marrow (BM)-MSCs, Umbilical cord (UC)-MSCs.
- Fibroblasts and Derma Papilla Cells (DPC) can also be cultured using CellCor™ CD/SFD MSC.

2. Under what conditions should medium be thawed? How should the thawed medium be stored?

- Incubate medium for one (1) hour at room temperature, then water bath at 37°C until completely thawed. Store at 4°C for 4 weeks after thawing. We recommend not to re-freeze the medium.

3. Are there any ways to store the product longer?

- After thawing, aliquot as much medium as you need, then store at 4°C.

4. Should antibiotics be added when culturing?

- CellCor™ CD/SFD MSC does not contain antibiotics. When antibiotics are necessary, please add antibiotics that best suit your experiment.

5. What is the recommended condition for culturing MSCs?

- We recommend to culture the cells in a 37°C, 5% CO₂ incubator and initial seeding of 4,000-5,000 cells/cm².

6. Is coating necessary when culturing MSCs?

- Coating is unnecessary. If cells do not attach to the flask (or plate), use a coating solution or replace the flask (or plate).

(Recommended Coating material manufacturer: Falcon, Corning, Nunc)

- Coating can be used depending on the experiment.
- Refer to #7 for coating process.

7. What are the methods of coating to a well-plate or culture plate?

- Add 1-5 µg/cm² fibronectin solution (or 0.02% gelatin solution) to a culture flask (or plate), then incubate at 37°C for 30-60 minutes. Remove the solution and wash with DPBS twice.

※ General coating reagent could be used for a culture.

8. What kind of detach reagent can be used for subculture?

- We recommend to use TrypLE Express (ThermoFisher Scientific, #12604013). Also, accutase could be used.

- ※ General detachment reagent could be used for a culture.
- ※ Follow the instructions according to each reagent.

9. Can CellCor™ CD/SFD MSC be used as a freezing medium for cryopreservation?

- MSCs can be cryopreserved with Cellbanker 2 (Amsbio, #11891) or CellCor™ CD/SFD MSC with 10% DMSO.

10. What is the process of recovery after thawing cryopreserved MSCs?

- There is no need for recovery process.

11. Can CellCor™ CD/SFD MSC be used for isolation?

- CellCor™ CD/SFD MSC is for expansion only.

12. Can CellCor™ CD/SFD MSC be used to culture MSCs isolated by other serum free medium or FBS containing medium?

- Yes. We recommend to follow an adaptation process. (See Q#13)

13. Is there a recommended adaptation process?

- **Adaptation process**

- 1) Seed the cells with previously-used medium.
- 2) After culturing for 24 hours, change the half of medium with CellCor™ CD/SFD MSC.
(i.e.) For T-75 flask (15 mL) – Remove half (7.5 mL) from prior medium and add 7.5 mL of CellCor™ CD/SFD MSC.
- 3) When cells reach 75-85% confluency, use CellCor™ CD/SFD MSC to subculture. (**Figure 1**)

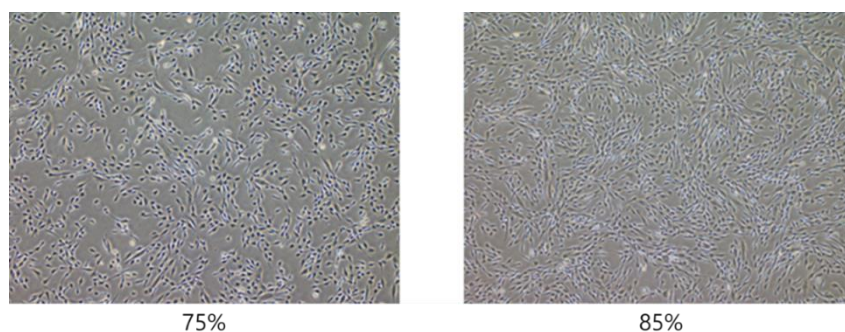


Figure 1. Cell Confluency

14. How are MSCs characterized?

- MSCs can be characterized by checking surface markers with flow cytometry. CD73, CD90, CD105 are shown for positive markers, and CD14, CD34, CD45, HLA-DR are negative markers.