Cardiac organoid cryopreservation kit

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Cat. No. : RIPO-HWM005

Description

The cardiac organoid cryopreservation kit is an optimized cryopreservation solution that allows whole cardiac organoid freezing at -80 °C and fast recovery. The kit supports high freeze/thaw viabilities with maximize function preserved. One kit allows the cryopreservation of 100 organoids.

Product Specification

This cryopreservation kit is a serum-free, well-defined medium set with minimal batch variation. The cryopreservation medium contains DMSO.

Product Information

Name	Size	Shipment	Storage
Cardiac organoid cryopreservation medium	10ml*3	Dry ice	The unopened products are stable for 6 months from the date of manufacture if stored under -80°C. The thawed products can be stored under 2-8 °C for two weeks.
Cardiac organoid recovery medium	10ml*3	Dry ice	

Materials Required for Organoid Culture

- Ultra-Low Adherent 6 Well plate
- Programmed cell freezing container
- Cell freezing tube
- Human iPSC-Derived Cardiac Organoid Maintenance Kit (Cat. RIPO-HWM004)

Equipment Required

- Incubator (37°C, 5% CO_2)
- Orbital shaker (2 mm shaking diameter)
- Biosafety cabinet

- Refrigerator -80 °C

Instruction of Use

Cryopreservation

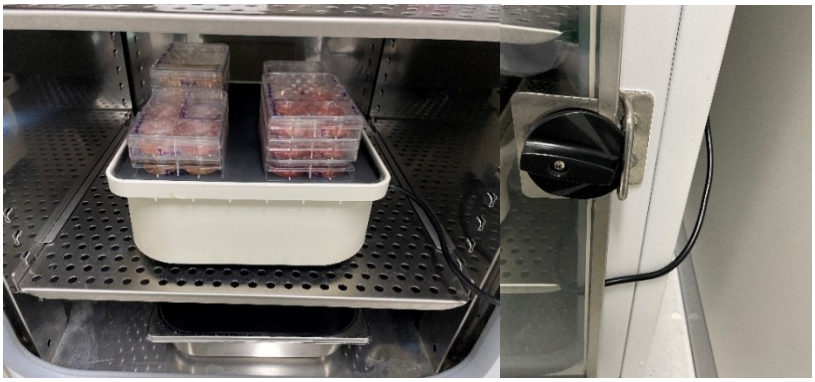
Note: the cryopreservation can only be realized on cardiac organoids that have already cultured to the Maintenance stage (11 days+ of Acrobiosystems culture system).

a. Transfer each cardiac organoid into a cell freezing tube. Aspirate out the culture medium transferred with the organoid as possible and avoid causing damage to the organoid.
b. Add 200ul of cryopreservation medium into each tube.
c. Put the tubes into a programmed cell freezing container.
d. Put the programmed cell freezing container into the refrigerator at -80 °C, keep overnight.
e. Transfer the tube to other containers if necessary.

Note: The cryopreserved organoids can be stored under -80 °C for one year. Liquid nitrogen storage is not recommended.

Recovery

a. Take the cryopreserved organoids out from the refrigerator. Put the tubes into a water bath of 37°C for 1 min. (Shake the tubes gently with hands to accelerate thawing the organoids.)
b. Verify the organoids are fully thawed.
c. Transfer the organoids into the Ultra-Low Adherent 6 Well plate with in maximum 24 organoids per well.
d. Add 5 ml of recovery medium in each well.
e. Put the plate on an orbital shaker (as shown figures) with the speed of 100 rpm. Incubate at 37° C, 5% CO_2 for 48h.



Culture

a. After 48 h of recovery, change the recovery medium in each well to 5ml Cardiac organoid maintenance medium (Cat. RIPO-HWM004) per well

b. Keep the plate an orbital shaker (as shown figures) with the speed of 100 rpm. Incubate at 37° C, 5% CO_2.

c. Full medium change every other days.

Note: Organoids cannot be passaged.

Related Products

Product	Cat. No.
Human iPSC-Derived Cardiac Organoid Maintenance Kit	**RIPO-HWM004**