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Inspiration for Life Science

For research use only. Not for clinical diagnosis.

Catalog No. PMC- EAC11-COS

Epididymal Adipocyte Culture Kit, H-1 (Mouse)

(Mouse Cryopreserved Cell and culture medium)

Principle

Epidimal Adipocyte Culture Kit, H-1 (Mouse) (PMC-EAC11-COS) contains preadipocytes isolated from mouse epididymal adipose tissues and culture medium that induces differentiation of precursor cells into mature adipocytes. The kit provides a convenient system for studying the mechanism of adipogenesis as well as for examining effectiveness of drugs on metabolic syndrome such as obesity, diabetes and hypertension.

Components

Product Name/Code No.	Size	Quantity	Storage Conditions	Shelf Life
Epididymal Preadipocytes, mouse	1.5 x 10^6 cells	1	Liquid Nitrogen	1 year
Epididymal Adipocyte Culture Medium (Code: PMC-EACMR-COS)	125 mL	1	-20°C Freezer	6 months
			4°C	3 months

Shipping : dry ice

Materials required but not provided

- Variable volume pipettes
- Culture plate, 96-well, flat bottom

Precautions

1. Read the instructions carefully before beginning the culture.
2. This kit is for research use only, not for human or diagnostic use.
3. Upon receiving, cryovials are immediately transferred to and stored in liquid nitrogen until ready to use.
   It is recommended to use cell vial immediately upon receiving.

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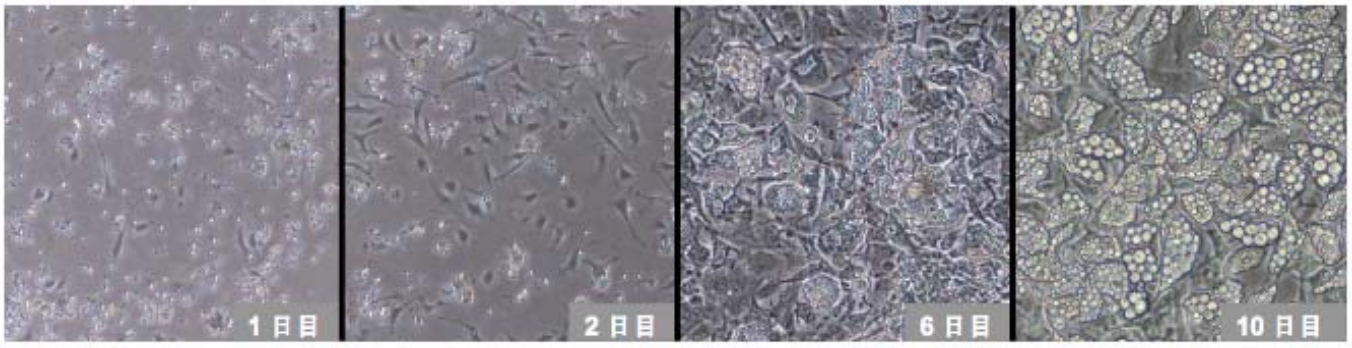
Protocol <Cultured with the 24well-plate>

* One kit contains preadipocytes for half of a 24-well plate.

1. Thaw Epidimal Adipocyte Culture Medium in a 37°C water bath with gentle shaking.
2. Quickly place Common Precursor Cell vial in a 37°C water bath until the contents are thawed.
3. Transfer thawed cells into a 15 mL centrifuge tube containing 10 mL of Epidimal Adipocyte Culture Medium. Mix gently and centrifuge at 4°C at 170 x g for 5 minutes.
4. Remove the supernatant, and re-suspend cells in 10 mL of Epidimal Adipocyte Culture Medium and centrifuge for 5 minutes at 4°C at 170 x g for 5 minutes.
5. Remove the supernatant, and re-suspend the cell pellet in 6.2 mL of Epidimal Adipocyte Culture Medium.
6. Dispense 0.5 mL of cell suspension to each well of 24-well plate and incubate the plate at 37°C in a 5% CO_2 humidified incubator.
7. Gently add 0.5 ml of Epidimal Adipocyte Culture Medium to each well of 24-well plate in the following day.
8. Change the medium every other day. Be careful to not disturb the cell layer.
   - ① Approximately 3-4 days of culture, preadipocyte culture becomes confluent.
   - ② Approximately 5 days of culture, cells turn to mature adipocytes.
   - ③ Approximately 8 days of culture, cells become hypertrophic and start detaching from the bottom of the well.

Cellular morphology



Day1 **Day2** **Day6** **Day10**

References

(1) Yoshida, H., Takamura, N., Shuto, T., Ogata, K., Tokunaga, J., Kawai, K., Kai, H. The Citrus Flavonoids Hesperetin and Naringenin Block the Lipolytic Actions of TNF-a in Mouse Adipocytes. Biochem. Biophys. Res. Commun. 394, 728-732 (2010)

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Manufactured by **Primary Cell Co., Ltd.**

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