KBM ADSC-1 & 2

Overview

- Capable of undifferentiated proliferation of adipose-derived stem cells (ADSC).
- Useful for research in differentiation induction into adipocytes, osteoblasts and chondrocytes*, and lipid production.

*Confirmed the capability to differentiate in vitro to generate adipocytes, osteoblasts and chondrocytes.

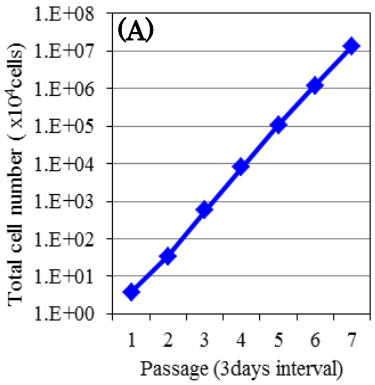
Characteristics

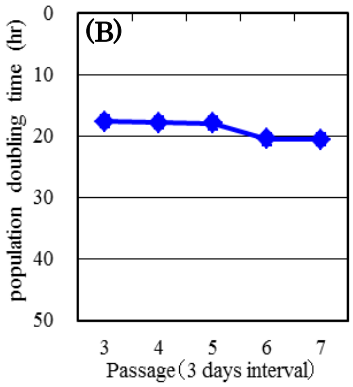
- KBM ADSC-1 is a medium including 5% FBS.
- KBM ADSC-2 is a serum-free medium. Human serum can be used instead of FBS.

Cell Culture Example

【Passage Culture Assay】

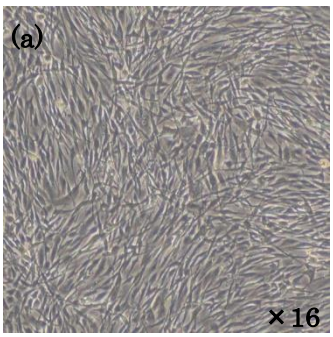
Cultured Cells: ADSCs (P1 frozen Cells, available commercially)
Primary Cells: 4.75×10^4 cells/well
Culture Vessel: 6 well cell culture plate (Corning 3516)
Protocols: Counted the number of cells on Day3 and passaged, and analyzed the cell surface markers by flow cytometry technique.

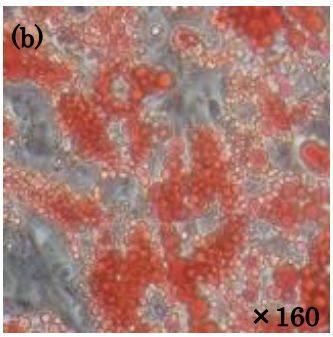


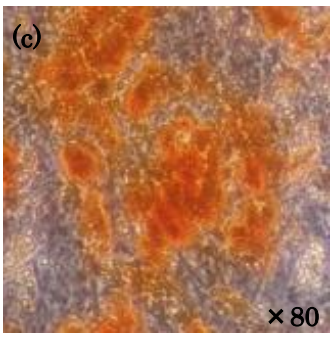


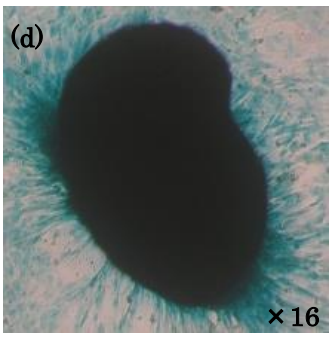
(C) (%)	P5	P6	P7
CD29	100	100	100
CD44	100	100	100
CD73	100	100	100
CD90	99.6	99.5	99.2
CD105	99.5	99.5	97.3

(A) Growth curve in passage culture
(B) Variation of PDT in passage culture
(C) Percentages of cell surface markers in passage culture









(a): ADSC on the 3rd day in P3
(c): Cells after 21 days of osteoblastic induction in P5 (Alizarin Red S stain)
(b): Cells after 7 days of adipogenic induction in P5 (Oil Red O stain)
(d): Cells after 28 days of chondrocytic induction in P3 (Alcian Blue stain)

【Differentiation Induction Assay】

Seeded Cells: ADSC (P1 frozen Cells, available commercially) which secondary cultured by KBM ADSC-1
Culture Vessel: 24 well cell culture plate (FALCON 353047)
Protocols:
Adipocytes: 6.25×10^4 cells/well seeded, cultured with D-MEM(H)+10%FBS+1mM sodium pyruvate. Differentiation induced with KBM Adipogenic-DM at Day 1, changing the medium in every two or three days, and stained with Oil Red O on Day 7.
Osteoblasts: 6.25×10^4 cells/well seeded, cultured with D-MEM(H)+10%FBS. Differentiation induced with KBM Osteogenic-DM at Day 1, changing the medium in every two or three days, and stained with Alizarin Red S on Day 21.
Chondrocytes: 6.25×10^4 cells/well seeded, cultured with D-MEM(H)+10%FBS. Differentiation induced with a general inducing medium at Day 1, changing the medium in every three or four days, and stained with Alcian Blue on Day 28.

Product No.	Product Name	Size	Price	Shelf Life	Storage
16030020	KBM ADSC-1	500 mL	JPY 26,000	1 year	-20℃
16030030	KBM ADSC-2	500 mL	JPY 23,000	1 year	-20℃

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