

# SUPERCULTURE Human Mesenchymal Stem Cell Adipogenic Differentiation Medium

Cat#: 6114531

## [Product Name]

Human Mesenchymal Stem Cell Adipogenic Differentiation Medium

## [Product Description]

Human Mesenchymal Stem Cell Adipogenic Differentiation Medium is specifically designed for the in vitro induction of human mesenchymal stem cells (hMSCs) into adipocytes. It can be used for the adipogenic differentiation of hMSCs derived from bone marrow, umbilical cord, adipose tissue, and other sources.

## [Model & Specification]

Product Name	Cat No.	Size	Component No.	Component Name	Component Size	Quantity
Human Mesenchymal Stem Cell Adipogenic Differentiation Medium	6114531	200 mL/Kit	XC0001A	Human Mesenchymal Stem Cell Adipogenic Differentiation Basal Medium	180 mL	1 bottle
			XC0002A-1	Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 1	20 mL	1 bottle
			XC0002A-2	Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 2	200 µL	1 bottle

## [Storage Conditions and Validity Period]

- Human Mesenchymal Stem Cell Adipogenic Differentiation Basal Medium: Store at 2°C~8°C, valid for 12 months.
- Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 1: Store at -15°C~-25°C, valid for 12 months.
- Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 2: Store at -15°C~-25°C, valid for 12 months.
- Prepared Human Mesenchymal Stem Cell Adipogenic Differentiation Medium: Store at 2°C~8°C, valid for 2 weeks.

## [Directions for Use]

- 1.Pre-coat a six-well plate with a cell attachment reagent (Cat#: 6063011, see instructions for details).
- 2.Thaw 20 mL of Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 1 and 200 µL of Human Mesenchymal Stem Cell Adipogenic Differentiation Supplement 2. Add them to

180 mL of Human Mesenchymal Stem Cell Adipogenic Differentiation Basal Medium to prepare a 10% concentration of the adipogenic differentiation medium (adjust volumes according to requirements).

3. Seed resuscitated or digested hMSCs at a density of  $0.6 \times 10^4 \sim 1.0 \times 10^4$  cells/cm<sup>2</sup> in the six-well plate. Add Cell Maintenance Medium (recommended to use Human Mesenchymal Stem Cell Culture Reagent Kit, Cat#: 6914511/6914521), 2 mL per well, and culture at 37°C in a 5% CO<sub>2</sub> incubator.

4. When cell confluency reaches 80%~90%, replace the cell maintenance medium with Human Mesenchymal Stem Cell Adipogenic Differentiation Medium, 2 mL per well.

5. Change the medium every 2~3 days, 2 mL per well.

6. On days 10th~21th of differentiation, perform Oil Red O staining to observe lipid droplet formation.

Note: Cell confluency should not be less than 80% before changing the differentiation medium.

Handle media changes gently to avoid cell detachment.

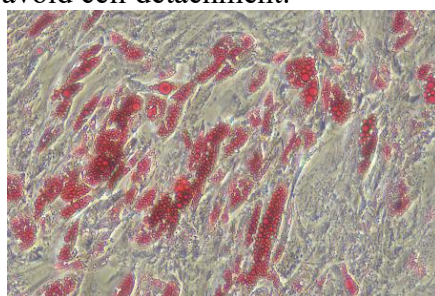










Figure 1. On day 14th of differentiation, Oil Red O staining showed obvious lipid droplets.

#### [Notes]

- Upon first thawing, aliquot it to avoid damage via repeated freeze-thaw cycle. Use with aseptic techniques.
- For research use only.
- Adipogenic differentiation of human mesenchymal stem cells may vary depending on cell source, passage number, and pre-culture conditions.

#### [Description of Product Symbol]

Product Symbol	Description	Product Symbol	Description
	Catalogue number		Batch code
	Date of manufacture		Use-by date
	Manufacturer		Temperature limit
	Keep away from sunlight		Consult instructions for use

#### [Related Products]

Product Name	Cat No.	Specification
Human Mesenchymal Stem Cells Culture Kit	6914511/6914521	500 mL/Kit
Mesenchymal Stem Cell Basal Medium	6114011/6114021	500 mL/bottle
Human Mesenchymal Stem Cell Osteogenic Differentiation Medium	6114541	200 mL/Kit

Human Mesenchymal Stem Cell Chondrogenic Differentiation Medium	6114551	200 mL/Kit
Cell Adhesion Reagent	6063011	100 mL/bottle

**[Instruction Revision date]**

2024.06.17

**[Company Information]****Manufacturer and after-sales service unit Name:**

Shenzhen Dakewe Bio-engineering Co., Ltd.

**Website:** www.dakewe.com**Telephone:** (86-755) 86235300**Email:** RD@dakewe.com**Production Address:** Room 702-703, Building No.1, Shenzhen Biomedicine Innovations Industrial Park, No.14 Jinhui Road, Kengzi Street, Pingshan District, Shenzhen**After-sales service telephone:** (86-755) 86235300**Zip Code:** 518122