

# Servicebio® Rat Bone Marrow Mesenchymal Stem Cells Adipogenic Differentiation Kit Product Manual

**Cat No.: G4116**

## Product Information

Product Name	Cat No.	Spec.
Rat bone marrow mesenchymal stem cells adipogenic differentiation kit	G4116-100ML	100 mL

## Product Introduction

Rat bone marrow mesenchymal stem cells adipogenic differentiation complete culture medium is suitable for rat bone marrow mesenchymal stem cells induced lipogenesis differentiation, The product contains various components required for the adipogenic differentiation growth of rat bone marrow mesenchymal stem cells, No additional ingredients are required, It can be directly used for the adipogenic differentiation of rat bone marrow mesenchymal stem cells.

## Storage and Shipping Conditions

Refrigerated transport, 2-8 °C keep in dark place, Valid for 3 months.

## Product Component

Component Number	Component	G4116
G4116-1	Rat bone marrow mesenchymal stem cells adipogenic differentiation complete culture medium	100 mL
G4116-2	Saturated oil red O dye	10 mL
G4116-3	Polylysine solution	10 mL
Product Manuals		1 copy

## product instruction

1. 500 μL of polylysine solution was inhaled into a 12-well plate under sterile conditions (Crawling tablets are not recommended, The induced cells tend to curl and float) .
2. Incubate at 37 °C overnight, Absorb the polylysine solution, PBS wash twice.
3. Rat bone marrow mesenchymal stem cells to be induced were inoculated into 12-well coated plates at a cell density of  $1 \times 10^5$  cells/ well (It is recommended to use cells of less than 5 generations) .
4. The cells were cultured in an incubator at 37 °C, 5%CO<sub>2</sub> and saturated humidity.
5. When the cell confluence reaches 100%, carefully remove the media completely from the pores.
6. 1 mL rat bone marrow mesenchymal stem cells adipogenic differentiation complete medium were slowly added into the pore after the restoration of room temperature to induce (Cold causes the cells to contract and float) .
7. Induce fluid change every 2-3 days, discard the culture medium in the orifice plate, the 1 mL fresh rat bone marrow mesenchymal stem cells adipogenic differentiation complete medium were added into (The filling process is gentle and slow) .
8. Induction 14-21 days or so, Observe cell status every day, Until visible droplets of fat appear, Termination induction (Each observation time should not exceed 10 min, Do not shake it) .
9. Discard the medium in the orifice plate, Slowly add PBS to restore room temperature and wash 1-2

times.

10. Add 500  $\mu$ L 4 % polyformaldehyde solution, Fixed 30 min.
11. Discard 4% of the paraformaldehyde solution, Wash 1-2 times with PBS.
12. Add 1 mL oil red O working liquid to each well (Mix 6 parts saturated oil red O dye with 4 parts distilled water, Place in a 60-70 °C water bath for 30 min, Let cool naturally and strain with qualitative filter paper, Get oil red O working liquid, Need to be used now) .
13. Dye at room temperature without light for 30 min.
14. Discard oil red O stain working liquid, Wash 1-2 times with PBS.
15. Add a small amount of PBS to take pictures under the microscope.

### Note

1. When receiving the medium, please check whether the outer package is in good condition, whether it is damaged or leaking, if so, please contact as soon as possible.
2. This product is not easy to place at room temperature or higher temperatures for a long time.
3. The shelf life of this product is three months, please use within the shelf life.
4. Please strictly perform aseptic operation to avoid contamination.

**Research Use Only**  
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**Диаэм, Москва** ■ ул. Магаданская, д. 7, к. 3 ■ тел./факс: 8 (800) 234-0508 ■ [sales@dia-m.ru](mailto:sales@dia-m.ru)

**С.-Петербург**  
[spb@dia-m.ru](mailto:spb@dia-m.ru)

**Новосибирск**  
[nsk@dia-m.ru](mailto:nsk@dia-m.ru)

**Воронеж**  
[vrn@dia-m.ru](mailto:vrn@dia-m.ru)

**Йошкар-Ола**  
[nba@dia-m.ru](mailto:nba@dia-m.ru)

**Красноярск**  
[krsk@dia-m.ru](mailto:krsk@dia-m.ru)

**Казань**  
[kazan@dia-m.ru](mailto:kazan@dia-m.ru)

**Ростов-на-Дону**  
[rnd@dia-m.ru](mailto:rnd@dia-m.ru)

**Екатеринбург**  
[ekb@dia-m.ru](mailto:ekb@dia-m.ru)

**Кемерово**  
[kemerovo@dia-m.ru](mailto:kemerovo@dia-m.ru)

**Нижний Новгород**  
[nnovgorod@dia-m.ru](mailto:nnovgorod@dia-m.ru)

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[www.dia-m.ru](http://www.dia-m.ru)