

Preparation of media for cultivation of JCRB1564 TMNK-1

A. Preparation of Mochitate modified MCDB131 (basal medium)

| | |
|--------------------------------------|--------------|
| Water | 984mL |
| Mochitate modified MCDB131(Powder)*1 | 10.35g |
| HEPES | 2.38g |
| NaHCO ₃ | 3.18g |
| Penicillin G*2 | 100,000units |
| Streptomycin*2 | 100mg |

Adjust pH to 7.2 by 1M NaOH, add water to total volume 1000 mL, and then filter sterilize.

B. Preparation of complete medium

Add the following supplements to 500 mL of Mochitate modified MCDB131 (basal medium)

EGM-2 SingleQuots (Clonetics, Cat.No.CC-4176)

| | |
|----------------|-------|
| FBS | 10mL |
| Hydrocortisone | 0.2mL |
| rhFGF-b | 2.0mL |
| VEGF | 0.5mL |
| R3-IGF-1 | 0.5mL |
| rhEGF | 0.5mL |
| Heparin | 0.5mL |

(Not use: Ascorbic acid, GA-1000 in EGM-2 Single Quots)

0.2M L-Ascorbic acid phosphate magnesium salt n-hydrate*3 0.5mL
(Fujifilm Wako Cat.No. 013-12061)

When you thaw the frozen cells and start the culture, and when you prepare the freezing medium containing 10% DMSO).

⇒ Use complete medium (B).

For routine maintenance and propagation of cells.

⇒ Use 1:1 mixture of basal medium (A) and complete medium (B)

*1) Special order.

*2) Optional.

*3) Ascorbic acid is readily oxidized and is lost 1 day after culture at 37°C. So, the ascorbic acid is substituted with stable one, L-Ascorbic acid phosphate Mg salt n-hydrate. This is transformed to ascorbic acid by the esterase on surface of cells.

L-Ascorbic acid phosphate Mg salt n-hydrate is dissolved to warm water, filter sterilized, dispense to small aliquots, and store frozen.