

# KBM Neural Stem Cell

## Overview

This medium is specialized for the neurosphere assay which is widely applied research and development regarding neural stem cells (NSCs) and neural cells. By adding KBM Neural Stem Cell Supplement to this medium and proceeding suspension culture, it is capable of culturing NSCs as neurospheres. Cultured neurospheres can produce new neurospheres by dispersing cells and re-culturing. It is also capable of inducing differentiation of NSCs into neural cells by adherent cell cultures of neurospheres, without addition of supplement.



## Characteristics

### [KBM Neural Stem Cell+Supplement]

- Serum-free and chemically-defined
- Capable of both undifferentiated proliferation and inducing differentiation of NSCs.
- Confirmed the capability to culture NSCs derived human iPS cells.

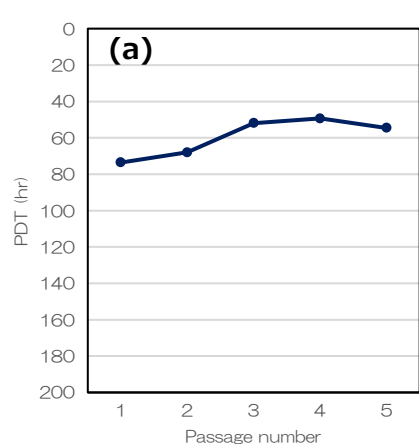
### [KBM XB2]

- Chemically-defined supplement(50x concentration)
- Contains retinoic acid(vitaminA)/

## Cell Culture Example

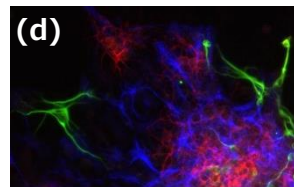
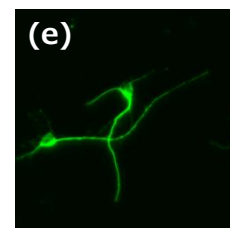
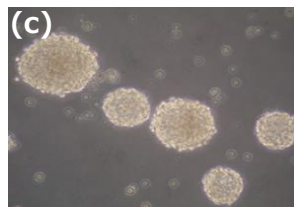
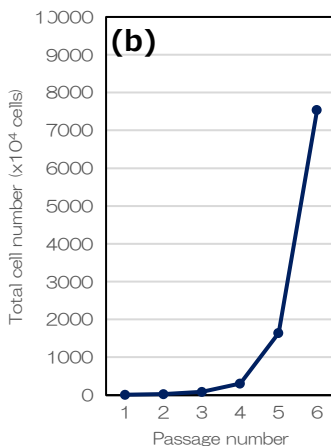
### (a) PDT variation at passages of NSCs

### (d) Picture of differentiated neurons



### (b) Total number of NSCs at passages

### (e) Picture of cultured neurospheres



**【Antibodies(d)】**  
 Green : anti-β tublin III  
 Blue : anti-GFAP  
 Red : anti-CNPase

**【Antibodies(e)】**  
 Green : TuJ-1

### 【Culture Condition(a,b,c)】

#### Culture medium

KBM Neural Stem Cell  
 +KBM Neural Stem Cell Supplement

#### Cell culture vessel

6 well cell culture plate (corning 3471)

#### Protocols

Cells were seeded at  $1 \times 10^5$  cells/mL,  
 and passaged every 5 days.

### 【Culture Condition(d)】

#### Culture medium

KBM Neural stem cell

#### Cell culture vessel

Cell culture cover glass  
 Poly-L-ornithine coating

#### Protocols

Neurospheres were seeded  
 and cultured for 5 days.

### 【Culture Condition(e)】

#### Culture medium

KBM Neural stem cell + KBM XB2

#### Cell culture vessel

Cell culture cover glass  
 Poly-L-ornithine coating

#### Protocols

Neurospheres were seeded  
 and cultured for 5 days.

Product No.	Product Name	Size	Price	Shelf Life	Storage
16050100	KBM Neural Stem Cell	500 mL	JPY 20,000	1 year	-20°C
16050300	KBM Neural Stem Cell Supplement	1mL	JPY 8,500	3 year	-20°C
16050400	KBM XB2	10 mL	JPY 23,000	2 year	-20°C

\* This Product is sold for research purposes only.