Glioma Cell Culture

Materials

MHM

name	dose	ratio
10X Hormone Mix	$50 \mathrm{mL}$	1:10
L-glu	$5~\mathrm{mL}$	1:100
p/s	$5~\mathrm{mL}$	1:100
10X DMEM	50 mL	1:10
30% glucose	$10~\mathrm{mL}$	1:50
7.5% NaHCO3	$7.5~\mathrm{mL}$	1:66.7
HEPES	$2.5~\mathrm{mL}$	1:200
ddH2O	$375~\mathrm{mL}$	-

hg medium

name	dose	ratio
MHM with p/s	$50~\mathrm{mL}$	-
B27	$1000~\mathrm{uL}$	1:50
FGF	$50~\mathrm{uL}$	1:1000
EGF	$50~\mathrm{uL}$	1:1000

Methods

Culture (from stock)

- defrost GBM stock in $37^{\circ}\mathrm{C}$ water bath
- MHM wash x1
 - centrifuge: 1200 rpm x5min
 - aspiration
- resuspend with 10mL hg medium, apply all to Ultra-low attachment T25
- after confirmation with microscope, transfer to incubator
- culture for 5 days (approx.)

Immunofluorescense

day1

- prepare adherent 24-well dish for observation
- aspirate fibro. in the wells
- apply hg medium 500uL each
- transfer culturing suspension 1mL each from T75 into wells
- 37°C incubation for 1hr

- confirm with microscope that nerospheres firmly adhere to the floor
- aspiration
- process with PFA x45min (approx.) in RT
- PBS wash x4
- process with 0.3% TX x5min (approx.) in RT
- PBS wash x2
- apply Primary Ab Mix
 - e.g.) Primary Ab Mix (for 1 well)

name	dose	ratio
Blocking One	500 uL	
anti-xxx Mouse mAb	$0.5~\mathrm{uL}$	1:1000
anti-yyy Rabbit mAb	$0.5~\mathrm{uL}$	1:1000

• 4°C o/n with shading

day2

- PBS wash x3
- apply Secondary Ab Mix
 - e.g.) Secondary Ab Mix (for 1 well)

name	dose	ratio
Blocking One	500 uL	_
anti-Mouse Gt	$0.5~\mathrm{uL}$	1:1000
anti-Rabbit Dk	$0.5~\mathrm{uL}$	1:1000

- shade in RT x1hr (approx.)
- PBS wash x2
- \bullet apply 1:1000 hochest

name	dose	ratio
PBS	$500~\mathrm{uL}$	-
hochest	$0.5~\mathrm{uL}$	1:1000

- shade in RT x5min (approx.)
- PBS wash x2
- wait until wells get dry
- observe with KEYENCE