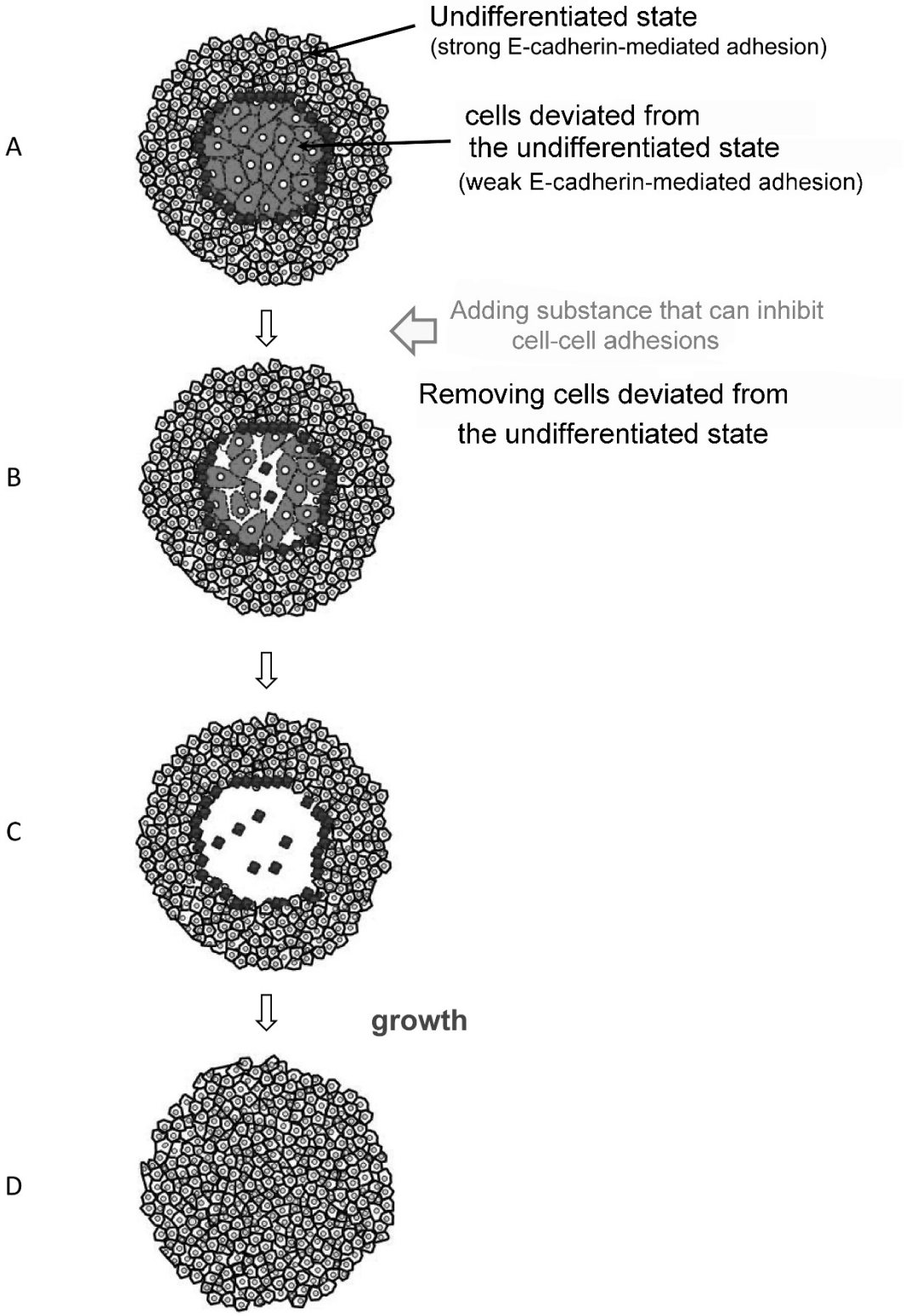

Undifferentiated state
(strong E-cadherin-mediated adhesion)
A
cells deviated from
the undifferentiated state
(weak E-cadherin-mediated adhesion)
Adding substance that can inhibit
cell-cell adhesions
Removing cells deviated from
the undifferentiated state
B
C
growth
D

FIG. 1

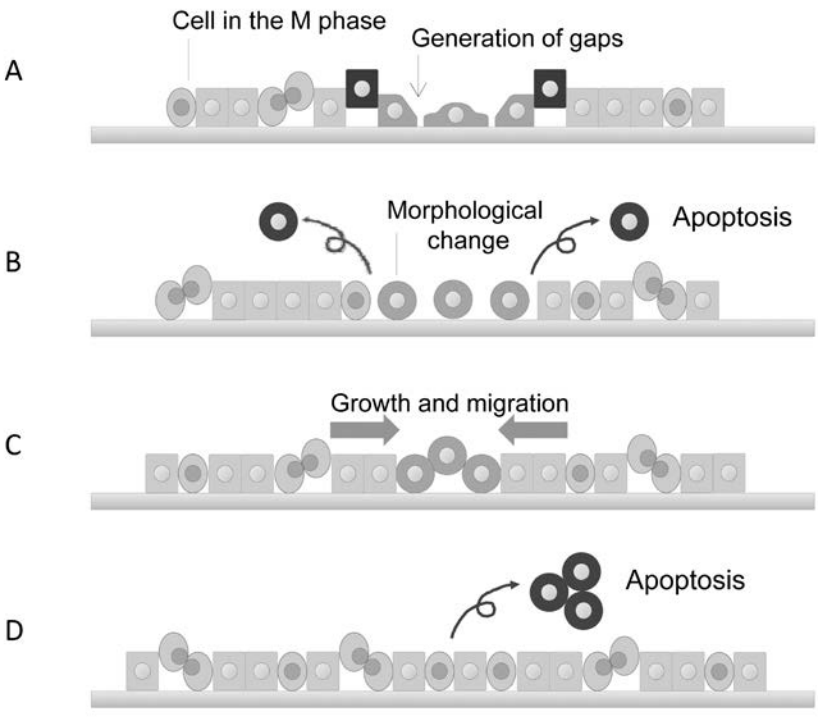

A
Cell in the M phase
Generation of gaps
B
Morphological change
Apoptosis
C
Growth and migration
D
Apoptosis

FIG. 2

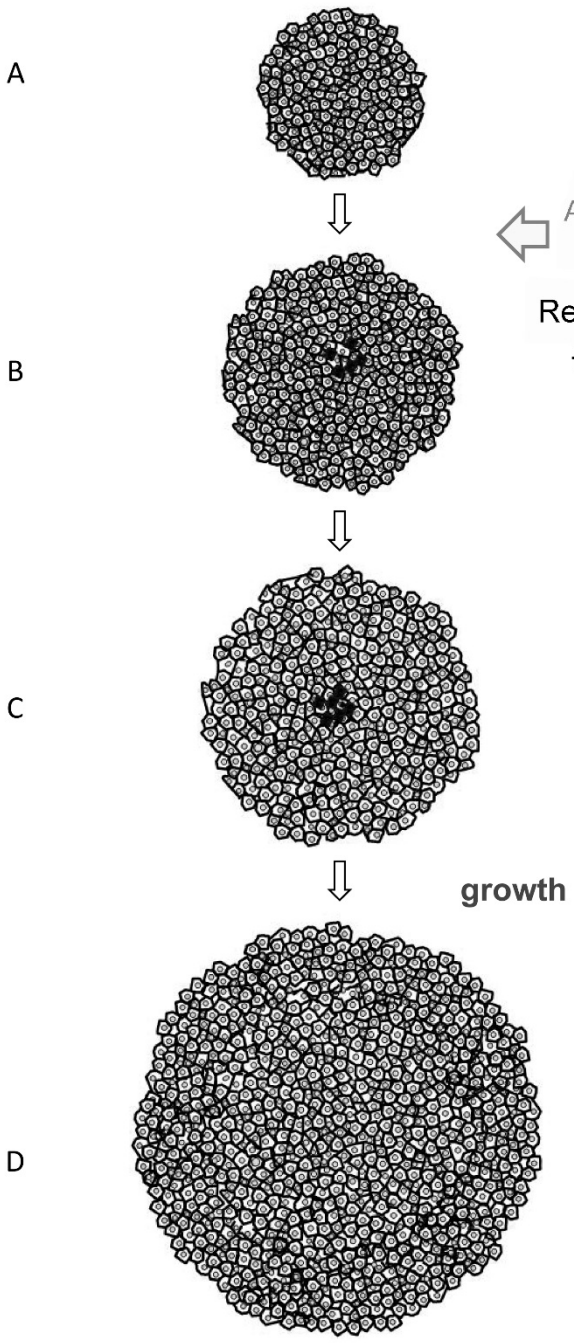

A
Adding substance that can inhibit cell-cell adhesions
Removing cells deviated from the undifferentiated state
B
C
growth
D

FIG. 3

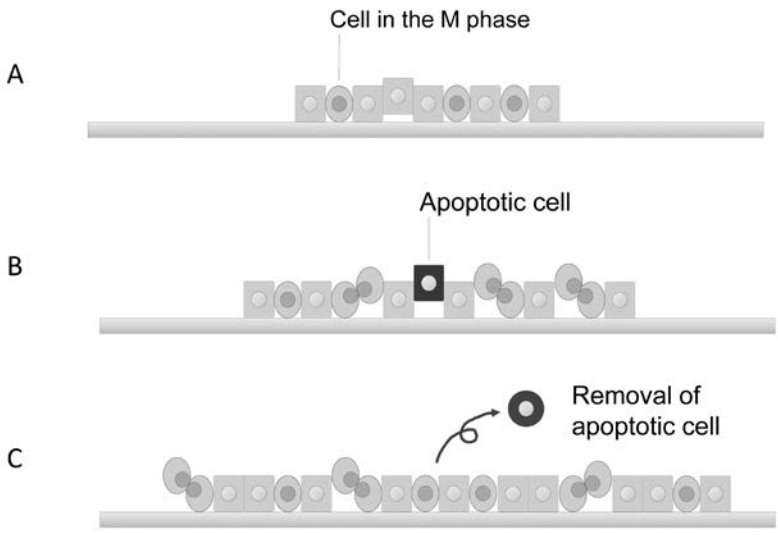

A
Cell in the M phase
B
Apoptotic cell
C
Removal of
apoptotic cell

FIG. 4

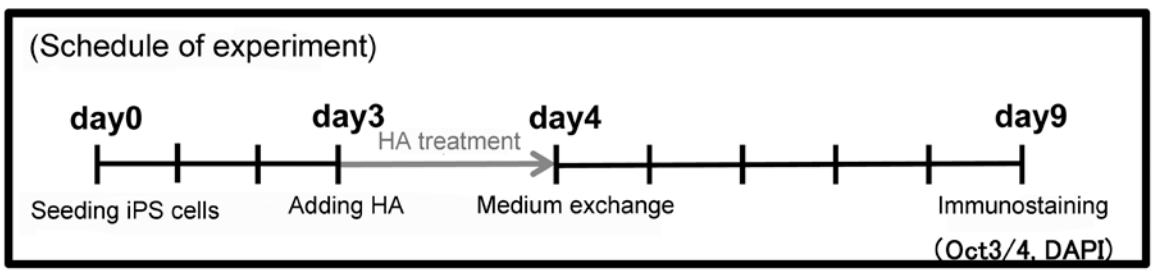

(Schedule of experiment)
day0
day3
HA treatment
day4
day9
Seeding iPS cells
Adding HA
Medium exchange
Immunostaining
(Oct3/4, DAPI)

FIG. 5

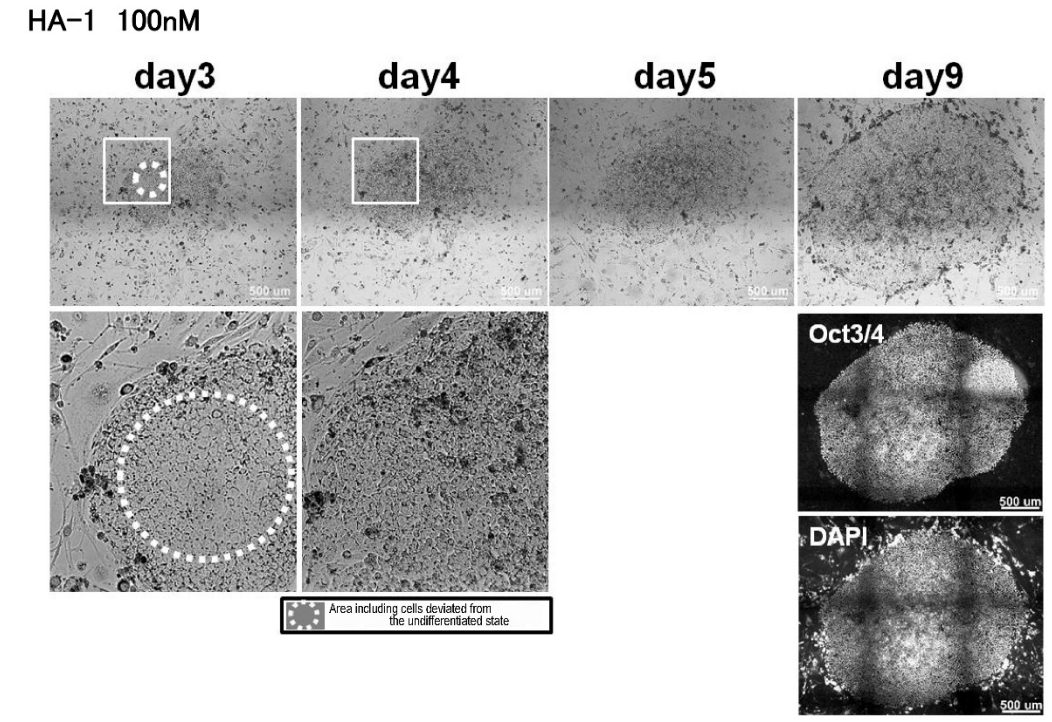

HA-1 100nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 6

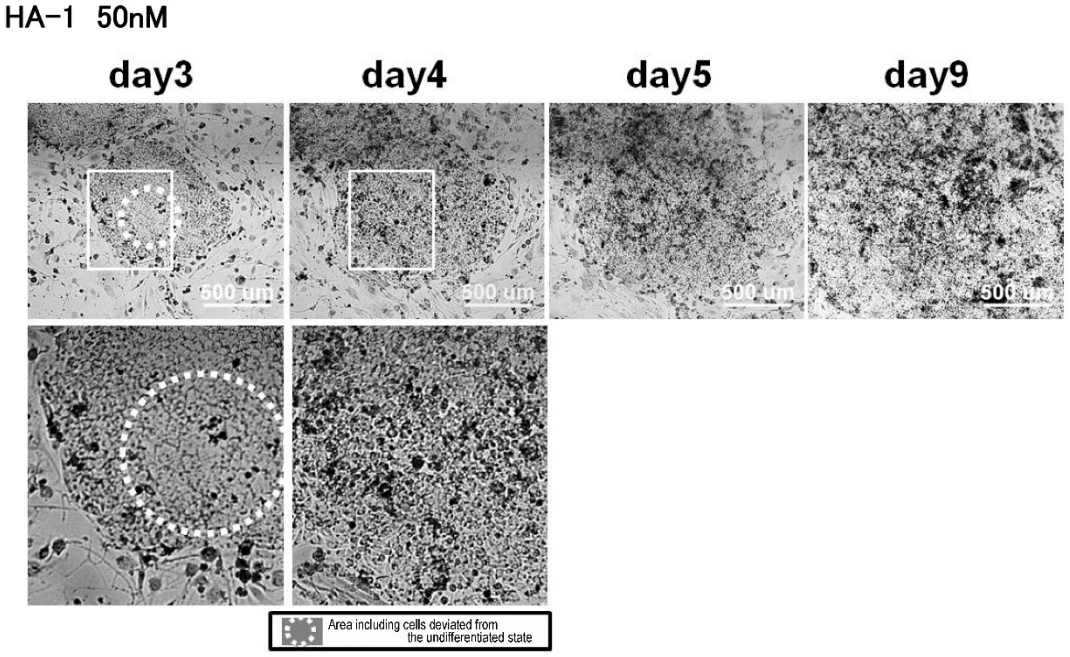

HA-1 50nM
day3
day4
day5
day9
500 um
Area including cells deviated from the undifferentiated state

FIG. 7

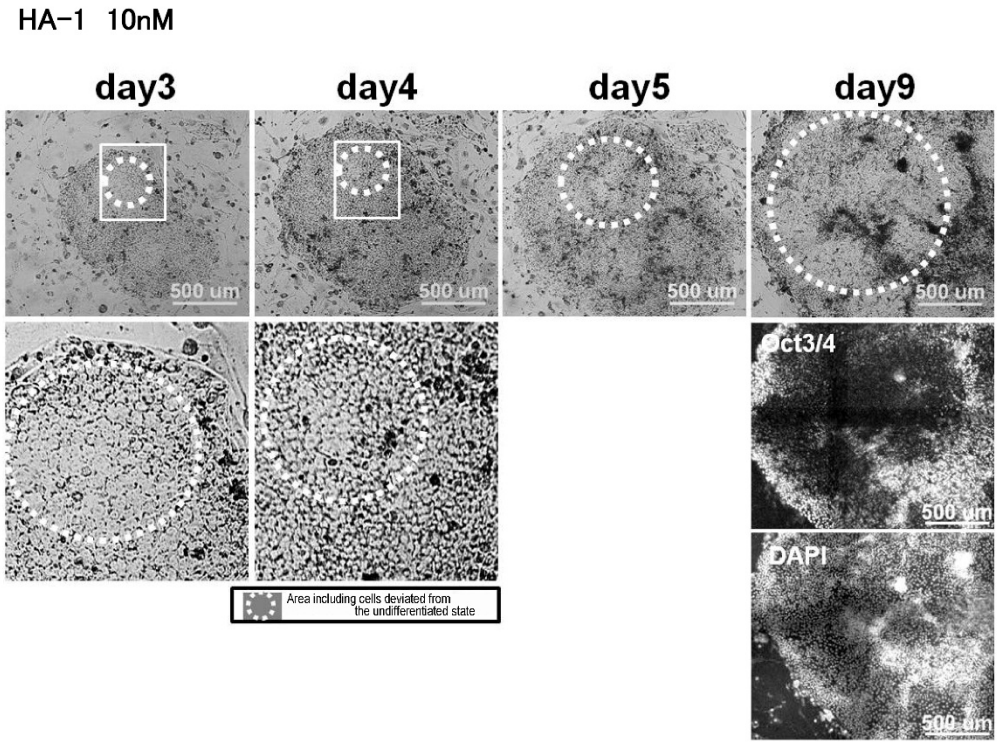

HA-1 10nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 8

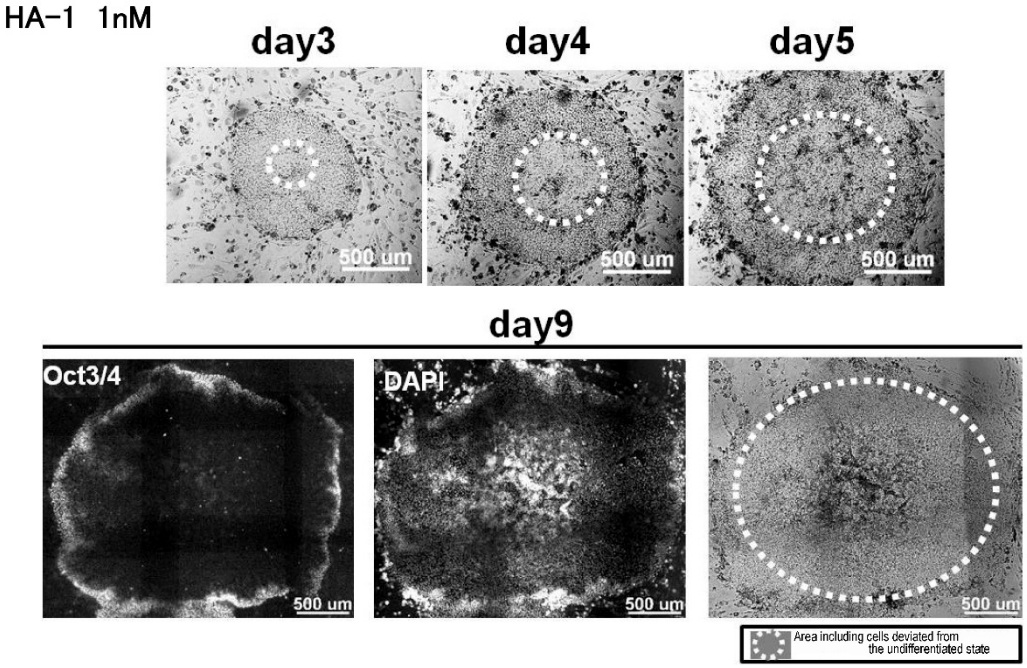

HA-1 1nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 9

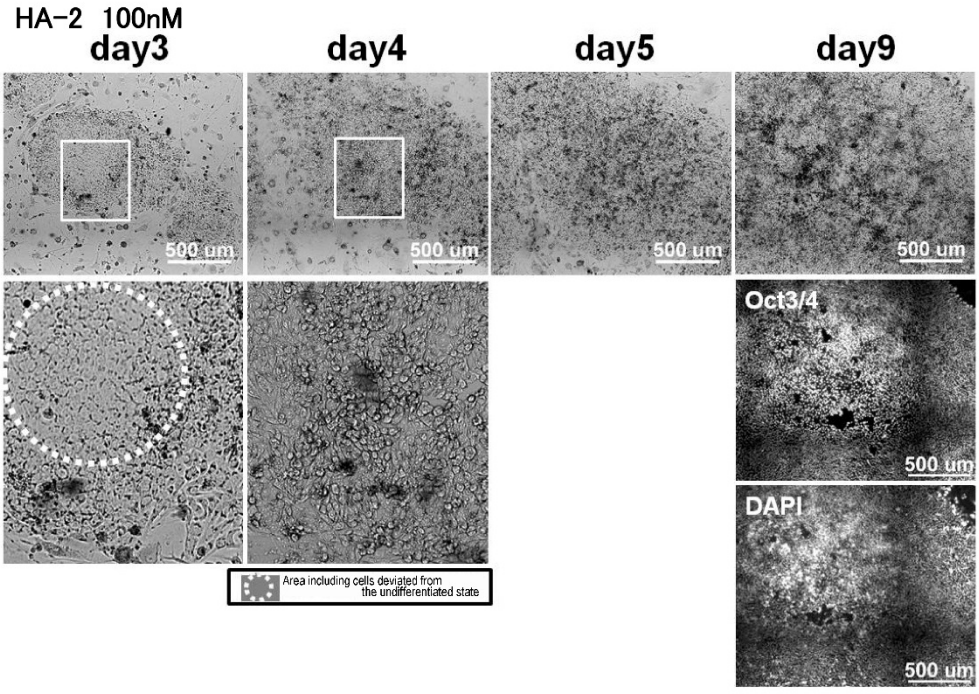

HA-2 100nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 10

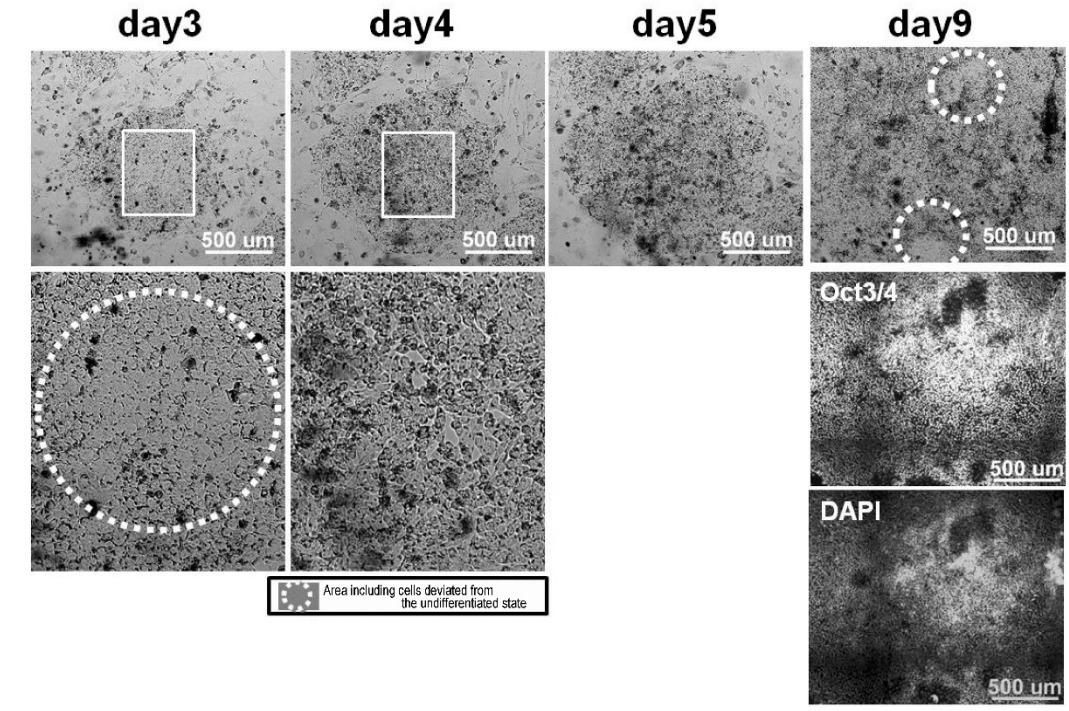

HA-2 50nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 11

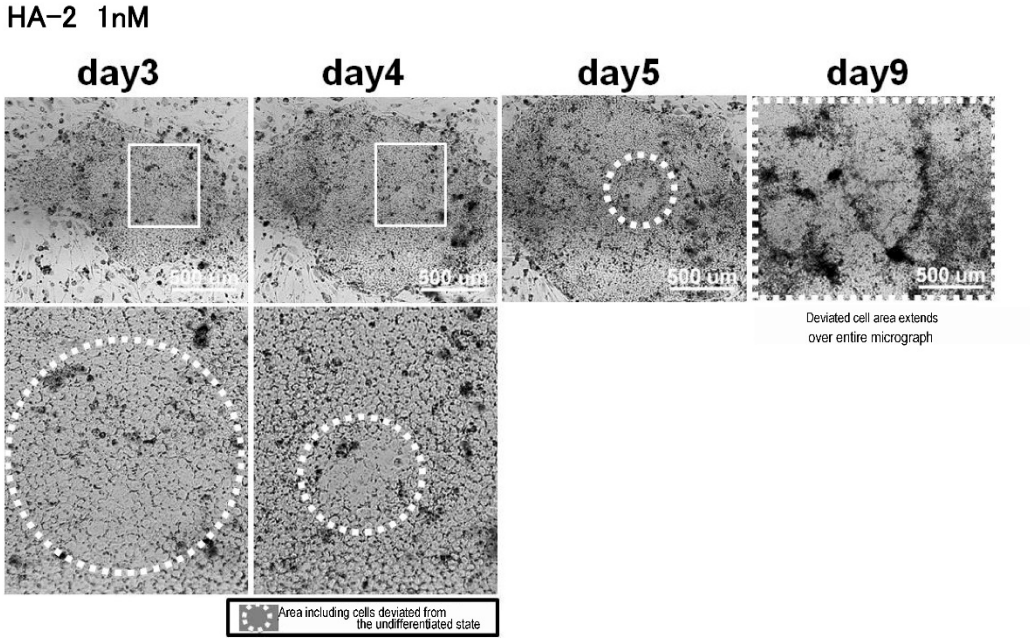

HA-2 1nM
day3
day4
day5
day9
500 um
Deviated cell area extends
over entire micrograph
Area including cells deviated from
the undifferentiated state

FIG. 12

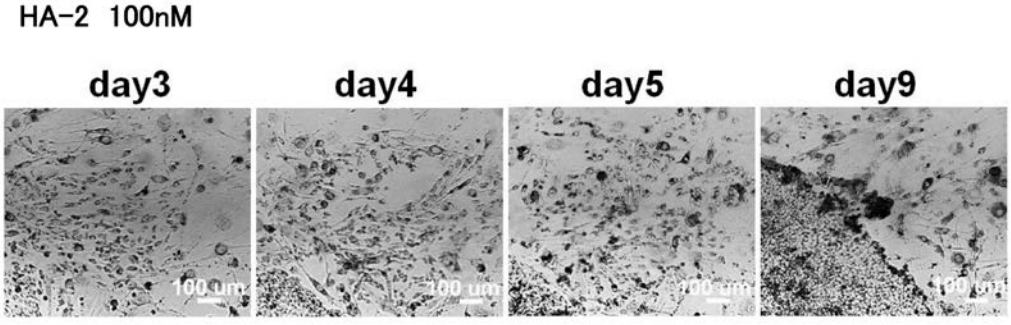

HA-2 100nM
day3
day4
day5
day9
100 um

FIG. 13

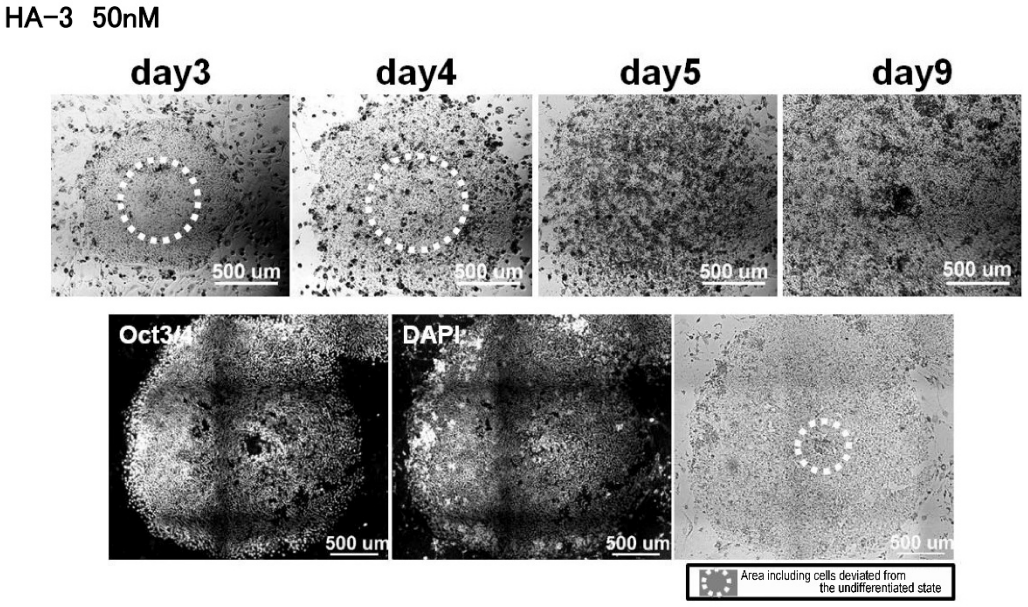

HA-3 50nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 14

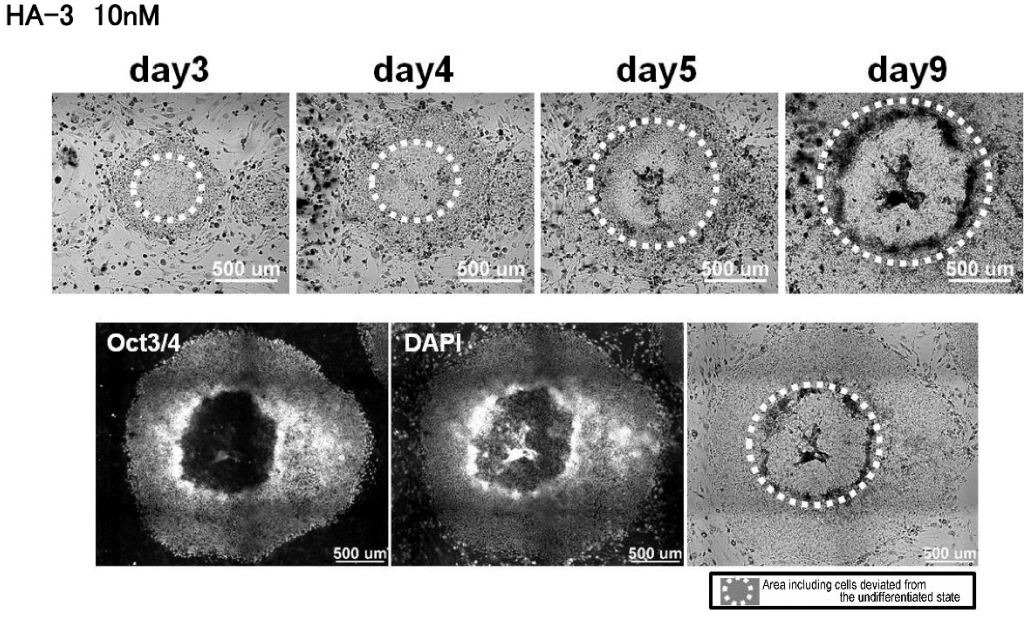

HA-3 10nM
day3
day4
day5
day9
500 um
Oct3/4
DAPI
Area including cells deviated from the undifferentiated state

FIG. 15

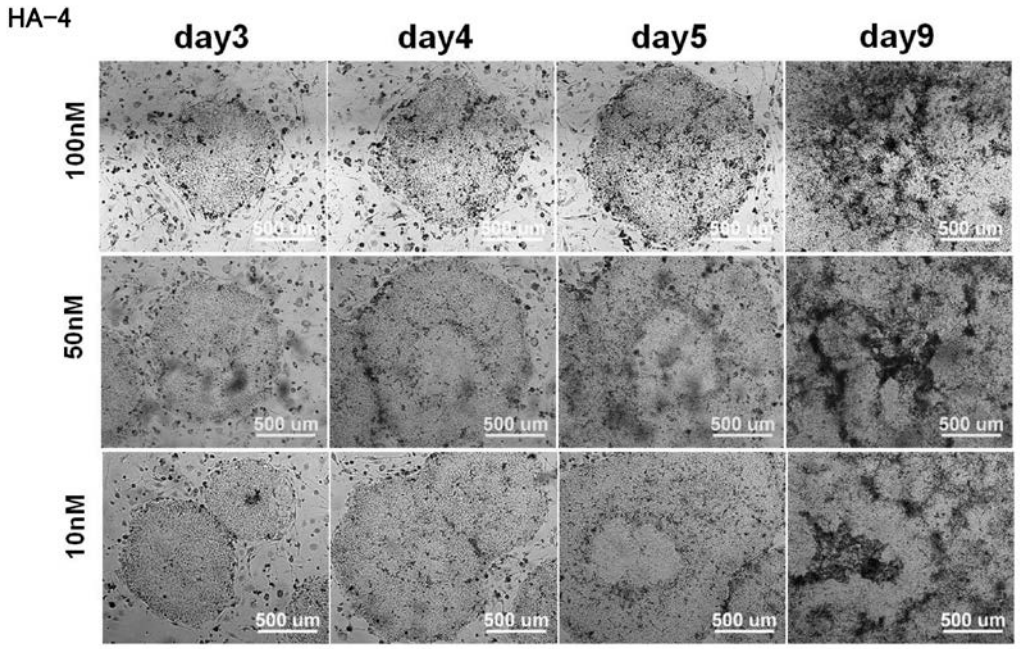

HA-4
day3
day4
day5
day9
100nM
50nM
10nM
500 um

FIG. 16

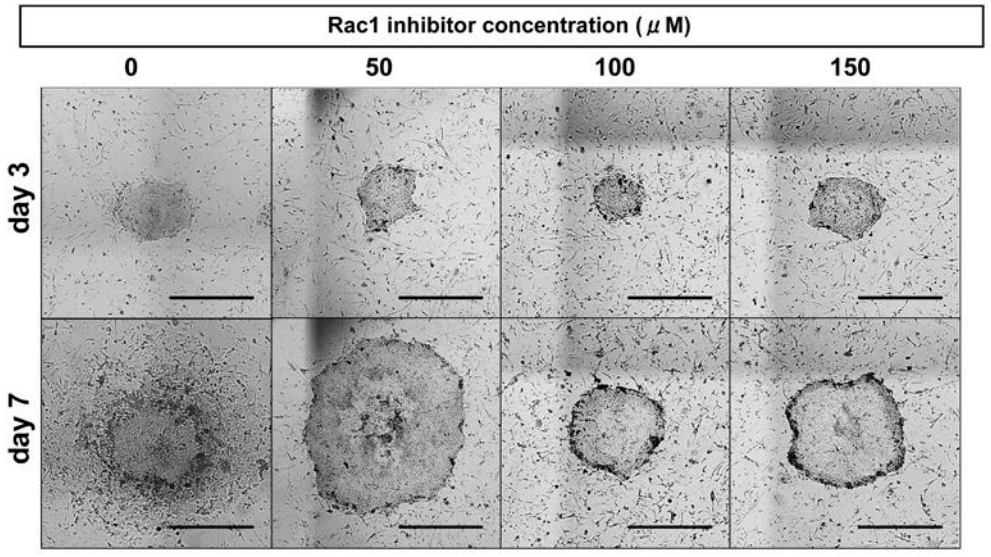

Rac1 inhibitor concentration (μM)
0
50
100
150
day 3
day 7

FIG. 17

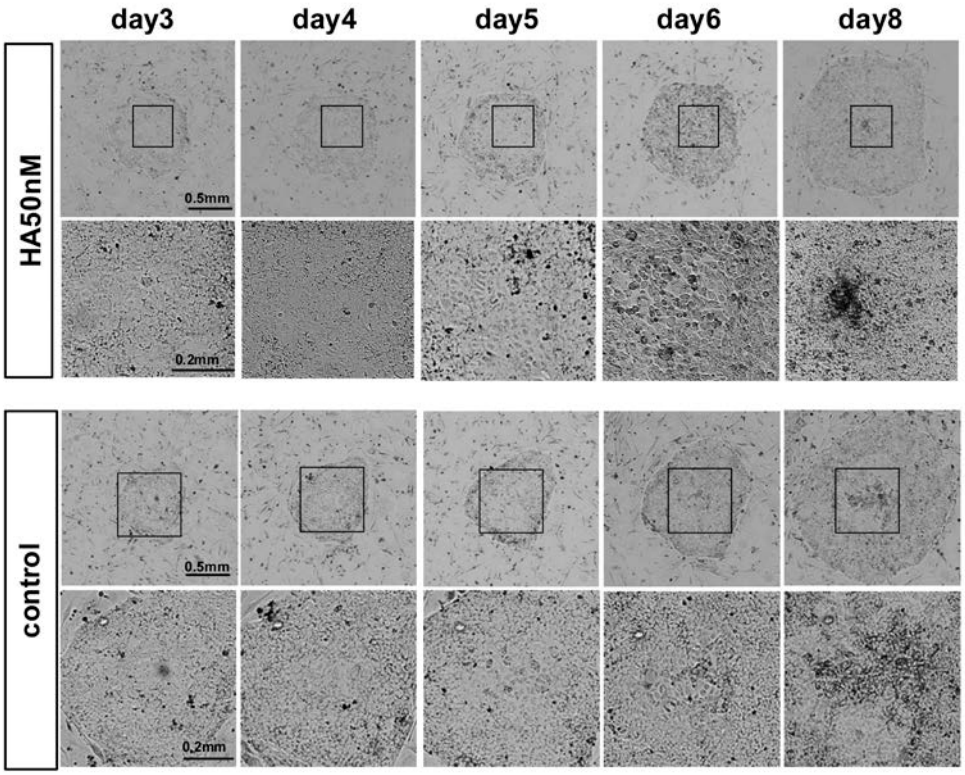

day3
day4
day5
day6
day8
HA50nM
control
0.5mm
0.2mm
0.5mm
0.2mm

FIG. 18

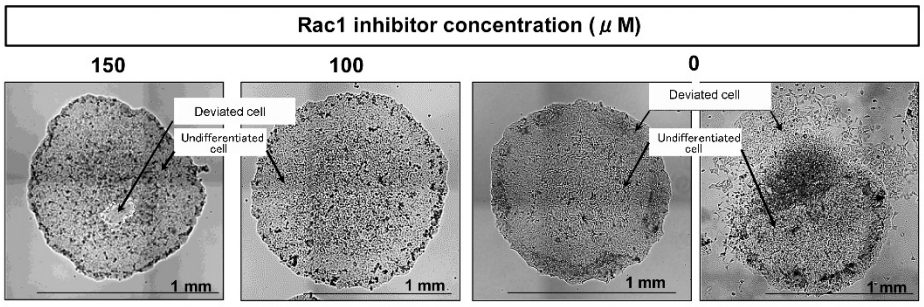

Rac1 inhibitor concentration (μM)
150
100
0
Deviated cell
Undifferentiated cell
Deviated cell
Undifferentiated cell
1 mm
1 mm
1 mm
1 mm

FIG. 19

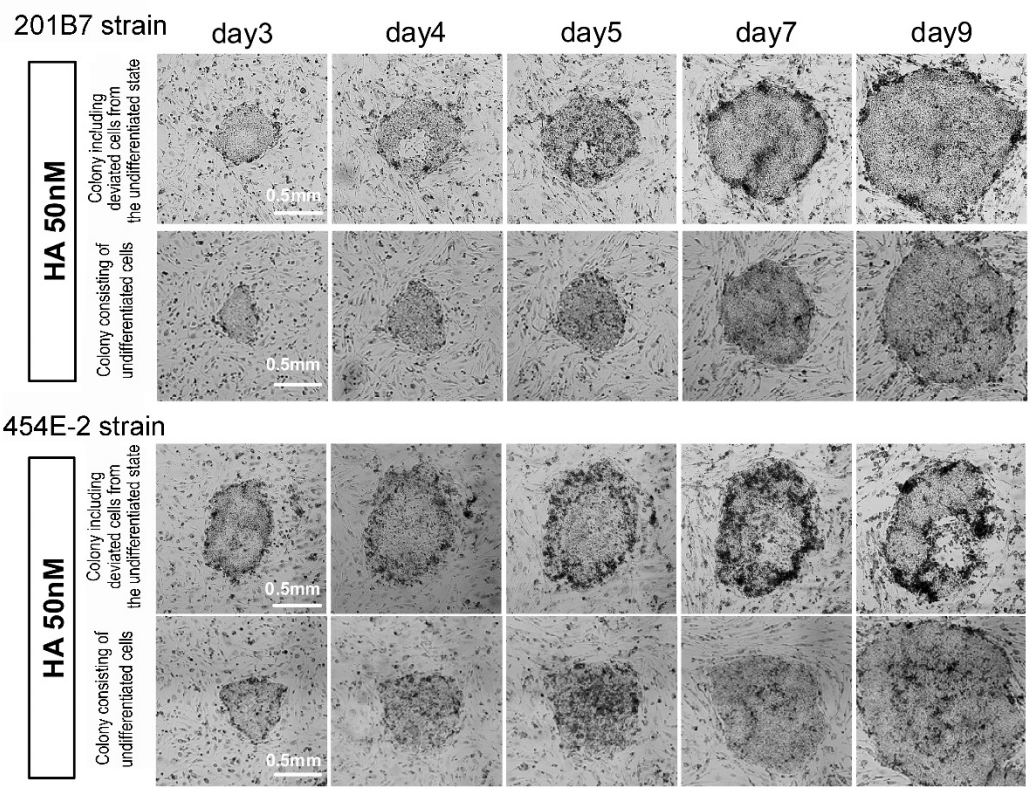

201B7 strain
day3
day4
day5
day7
day9
HA 50nM
Colony including deviated cells from the undifferentiated state
Colony consisting of undifferentiated cells
0.5mm
454E-2 strain
HA 50nM
Colony including deviated cells from the undifferentiated state
Colony consisting of undifferentiated cells
0.5mm

FIG. 20

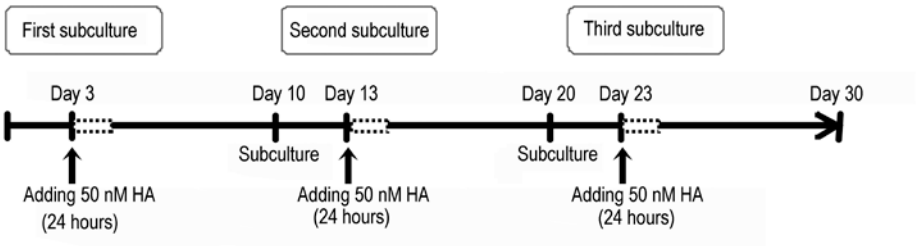

First subculture
Second subculture
Third subculture
Day 3
Day 10
Day 13
Day 20
Day 23
Day 30
Subculture
Subculture
Adding 50 nM HA (24 hours)
Adding 50 nM HA (24 hours)
Adding 50 nM HA (24 hours)

FIG. 21

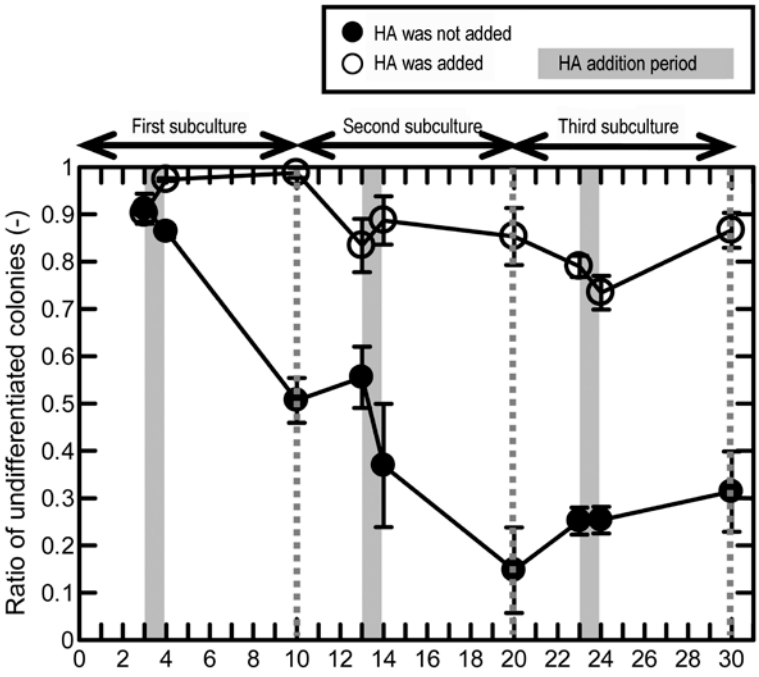

HA was not added
HA was added
HA addition period
First subculture
Second subculture
Third subculture
Ratio of undifferentiated colonies (-)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

FIG. 22