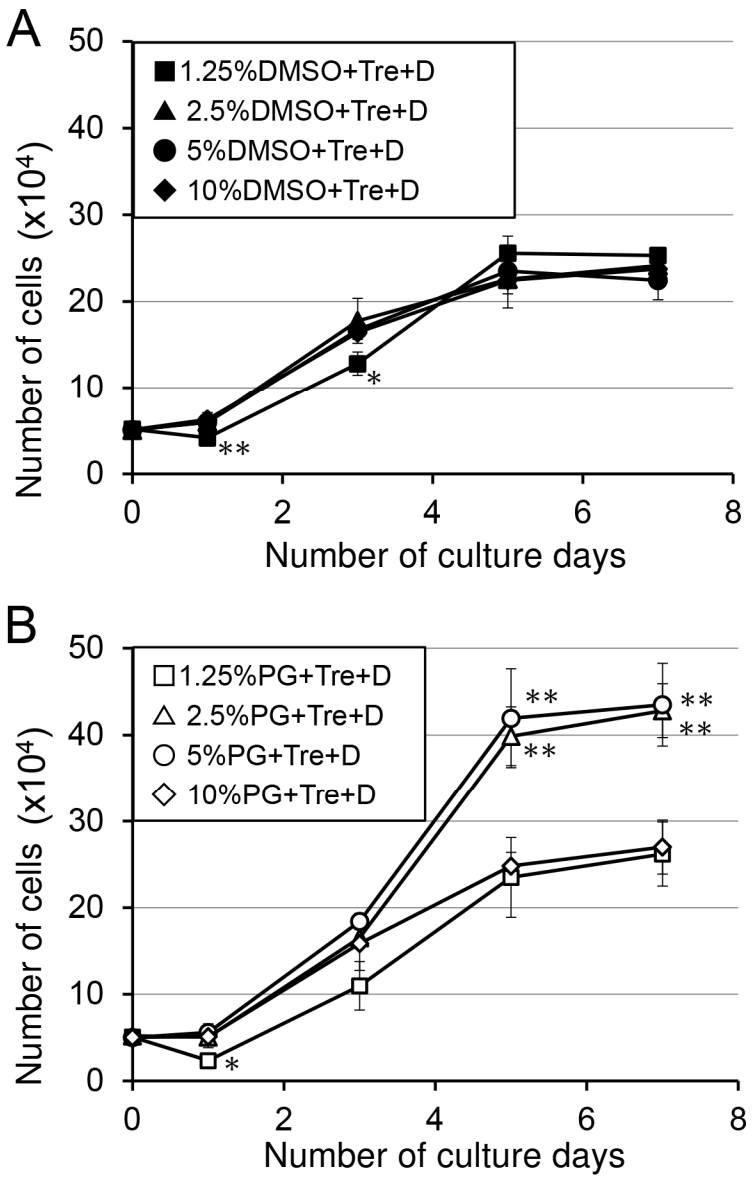
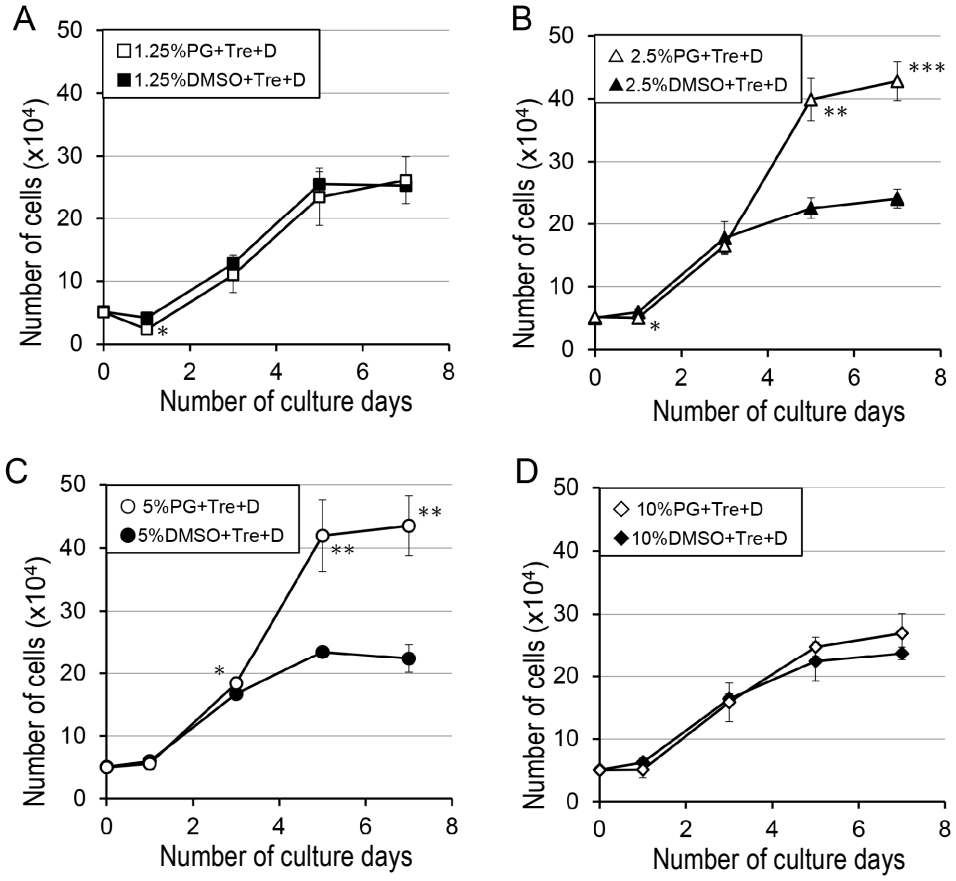
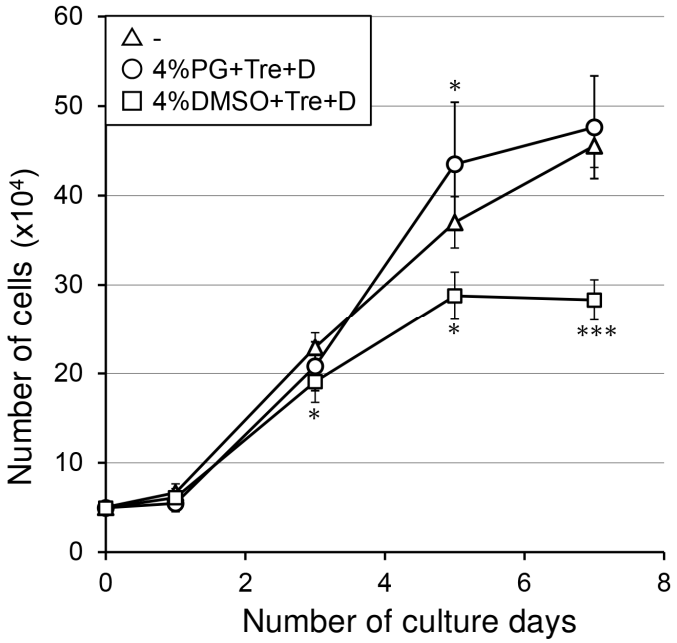
[Fig. 1]


A
1.25%DMSO+Tre+D
2.5%DMSO+Tre+D
5%DMSO+Tre+D
10%DMSO+Tre+D
Number of cells (x10⁴)
Number of culture days
B
1.25%PG+Tre+D
2.5%PG+Tre+D
5%PG+Tre+D
10%PG+Tre+D
Number of cells (x10⁴)
Number of culture days

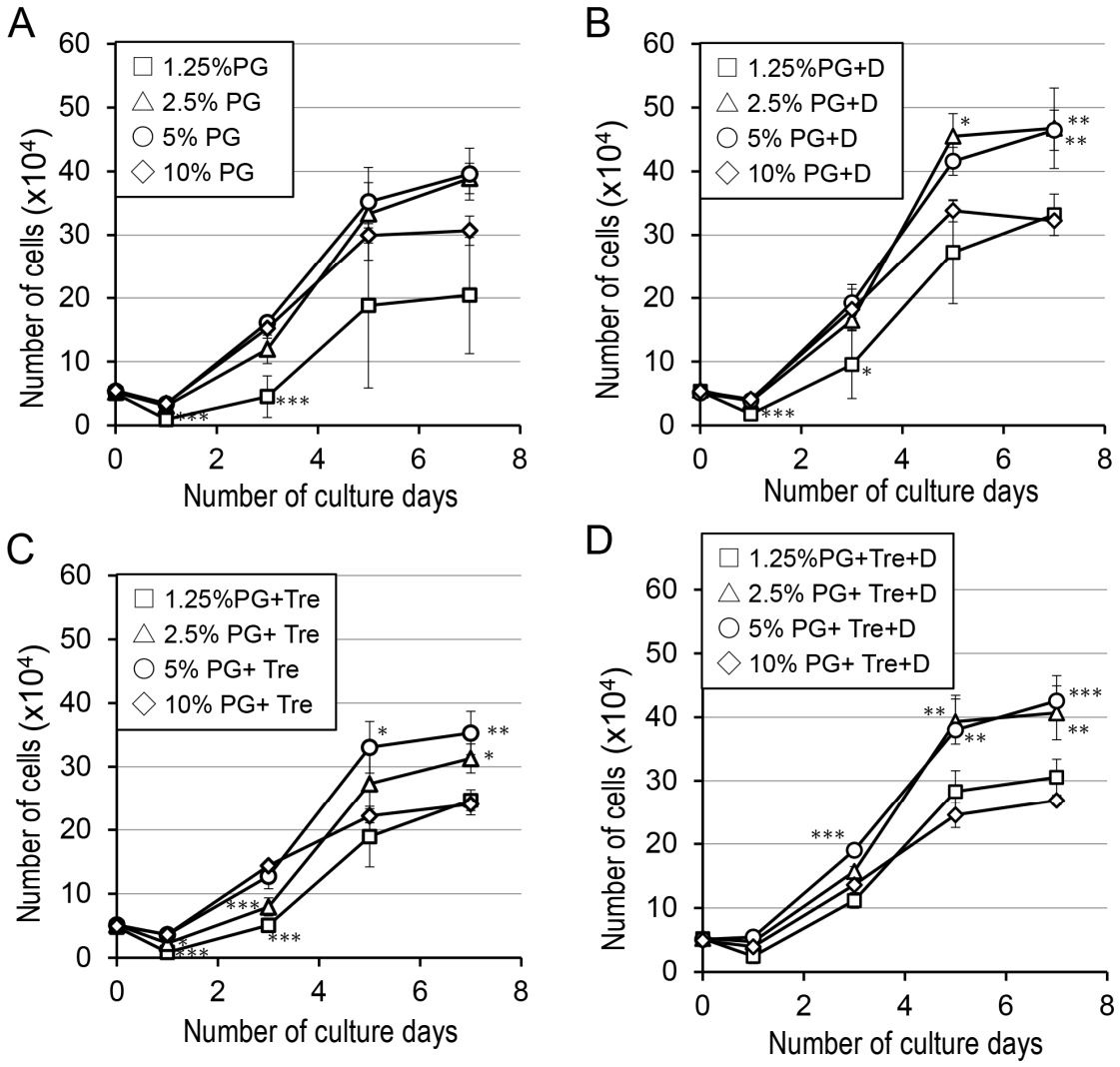
[Fig. 2]


A
1.25%PG+Tre+D
1.25%DMSO+Tre+D
Number of cells (x10⁴)
Number of culture days
B
2.5%PG+Tre+D
2.5%DMSO+Tre+D
C
5%PG+Tre+D
5%DMSO+Tre+D
D
10%PG+Tre+D
10%DMSO+Tre+D

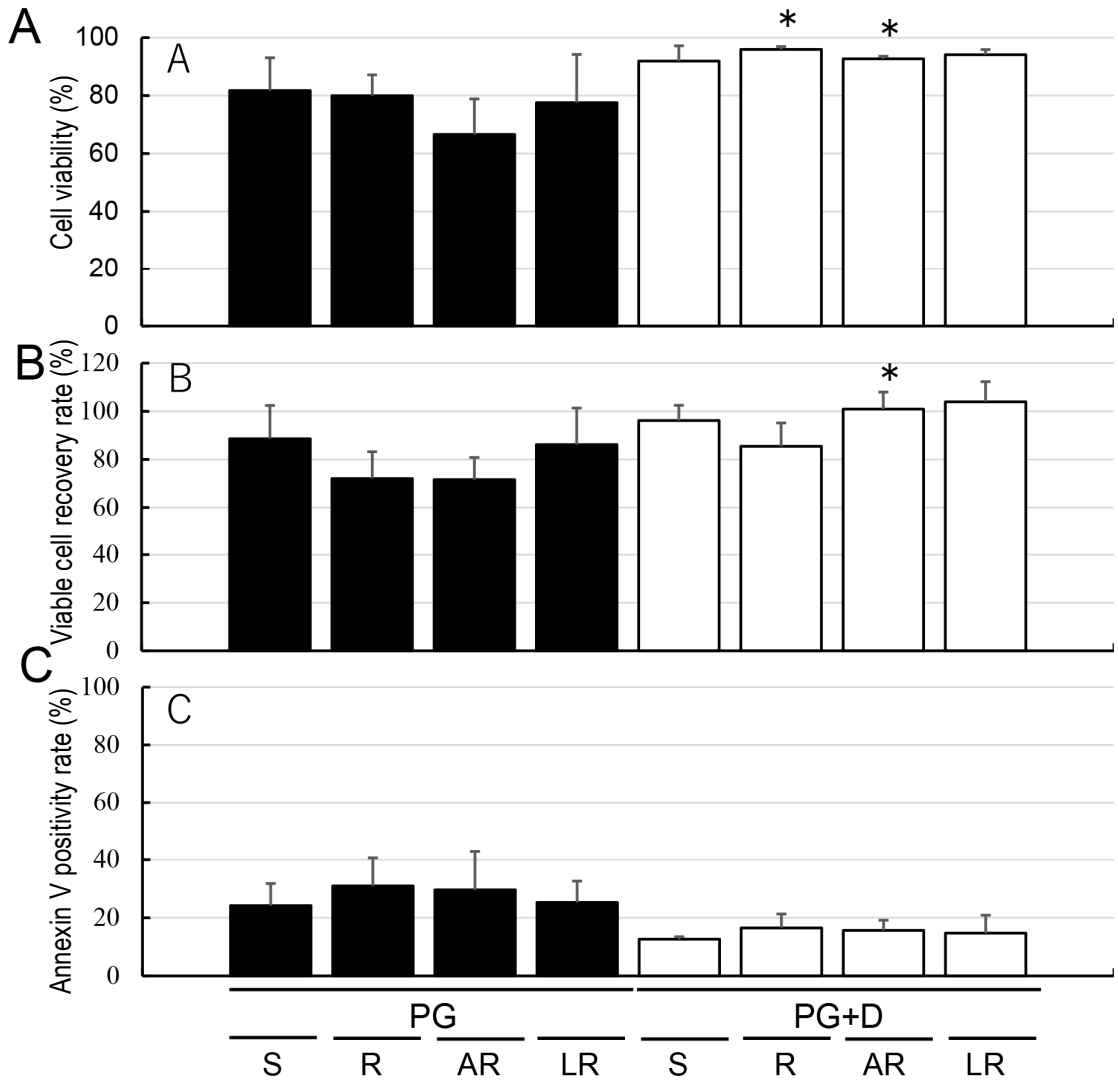
[Fig. 3]


-
4%PG+Tre+D
4%DMSO+Tre+D
Number of cells (x10⁴)
Number of culture days

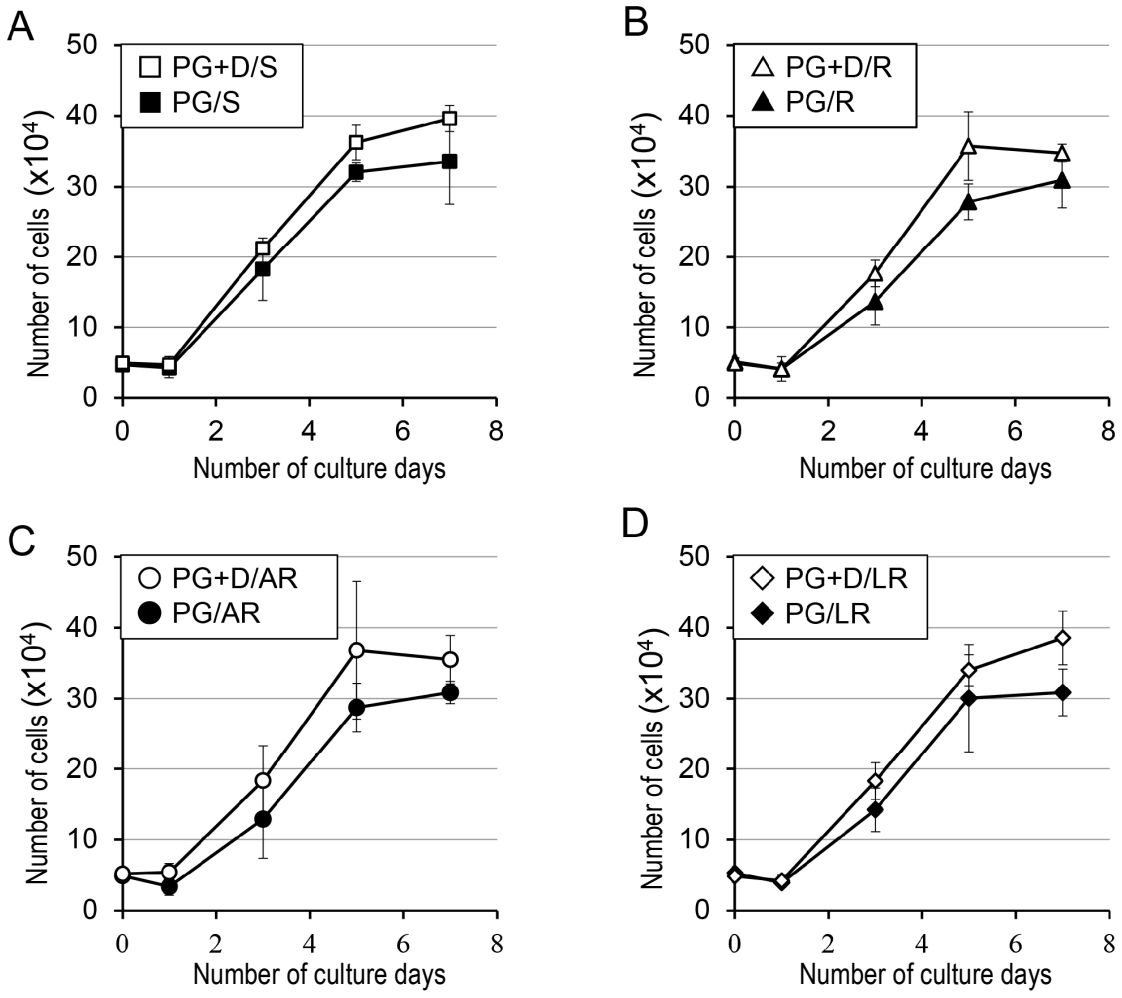
[Fig. 4]


A
1.25%PG
2.5% PG
5% PG
10% PG
Number of cells (x10⁴)
Number of culture days
B
1.25%PG+D
2.5% PG+D
5% PG+D
10% PG+D
Number of cells (x10⁴)
Number of culture days
C
1.25%PG+Tre
2.5% PG+ Tre
5% PG+ Tre
10% PG+ Tre
Number of cells (x10⁴)
Number of culture days
D
1.25%PG+Tre+D
2.5% PG+ Tre+D
5% PG+ Tre+D
10% PG+ Tre+D
Number of cells (x10⁴)
Number of culture days

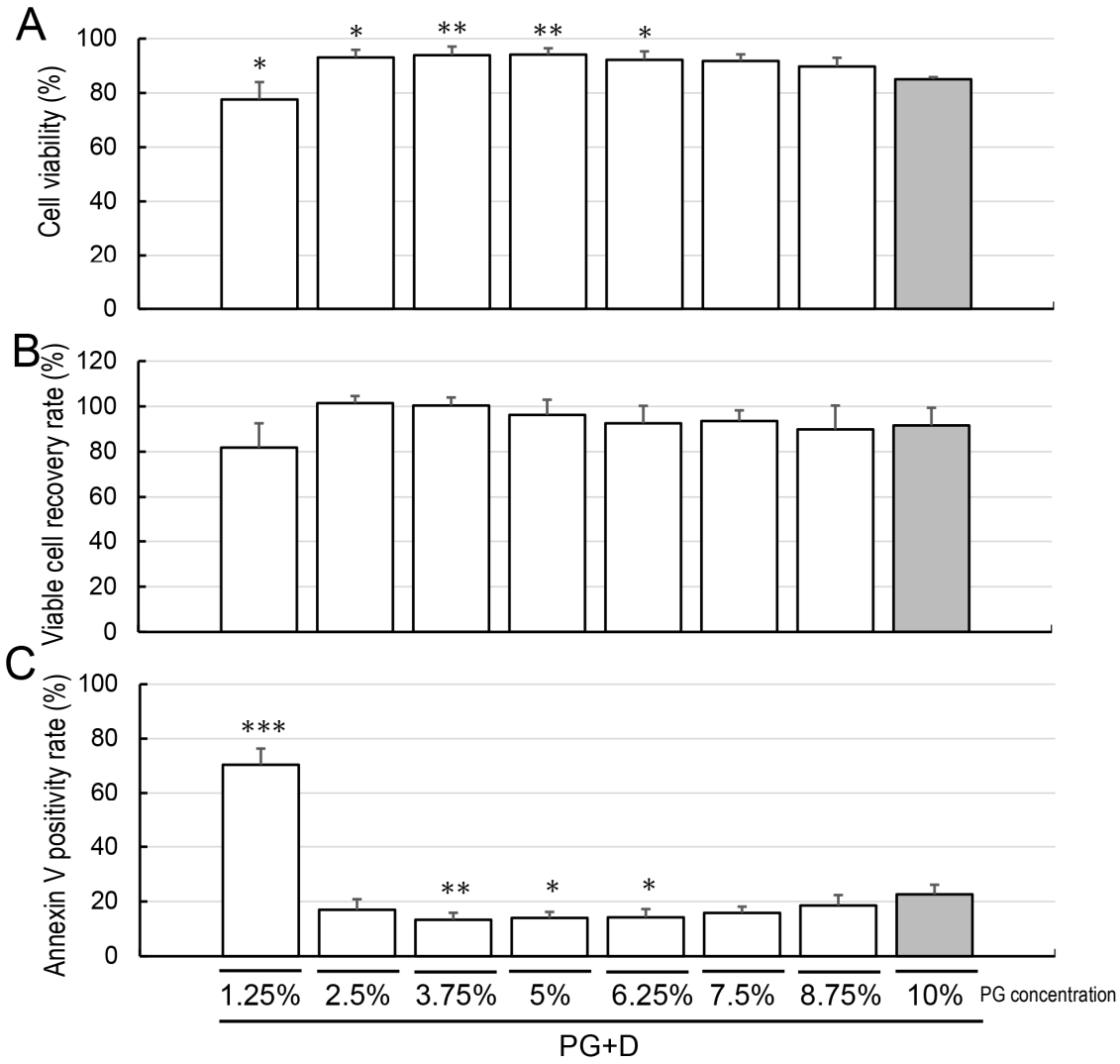
[Fig. 5]


A
A
Cell viability (%)
100
80
60
40
20
0
*
*
B
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
*
C
C
Annexin V positivity rate (%)
100
80
60
40
20
0
PG
PG+D
S
R
AR
LR
S
R
AR
LR

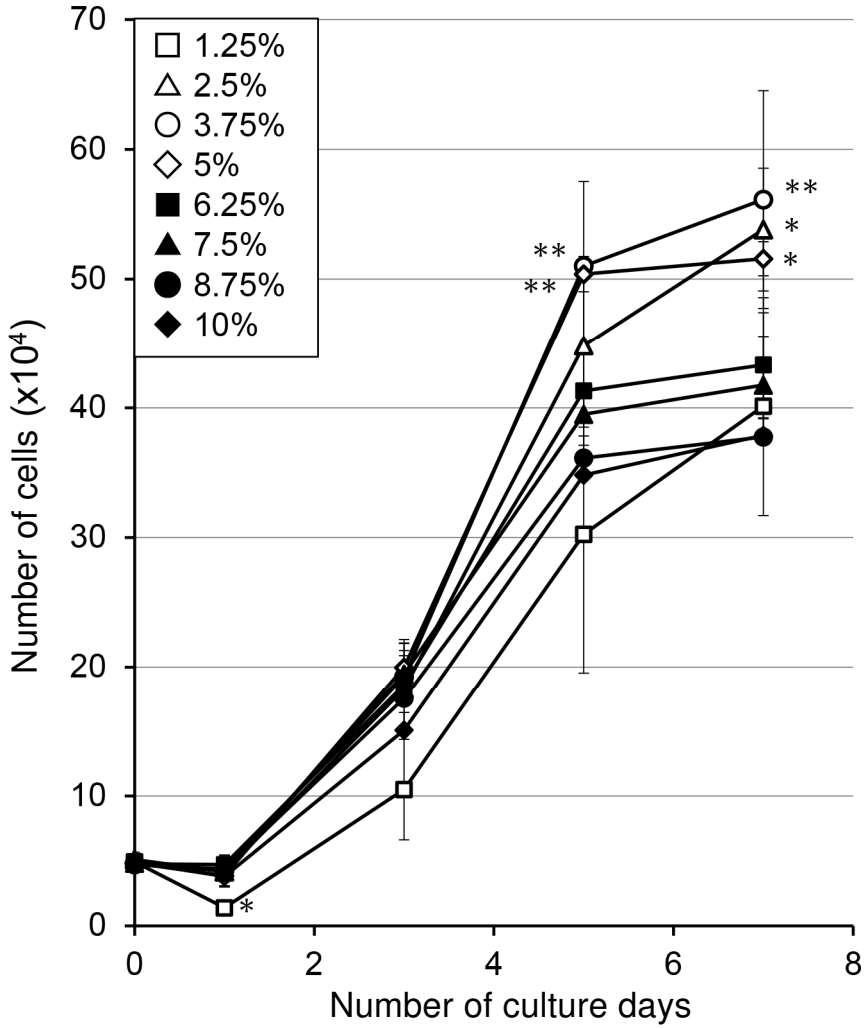
[Fig. 6]


A
PG+D/S
PG/S
Number of cells (x10⁴)
Number of culture days
B
PG+D/R
PG/R
Number of cells (x10⁴)
Number of culture days
C
PG+D/AR
PG/AR
Number of cells (x10⁴)
Number of culture days
D
PG+D/LR
PG/LR
Number of cells (x10⁴)
Number of culture days

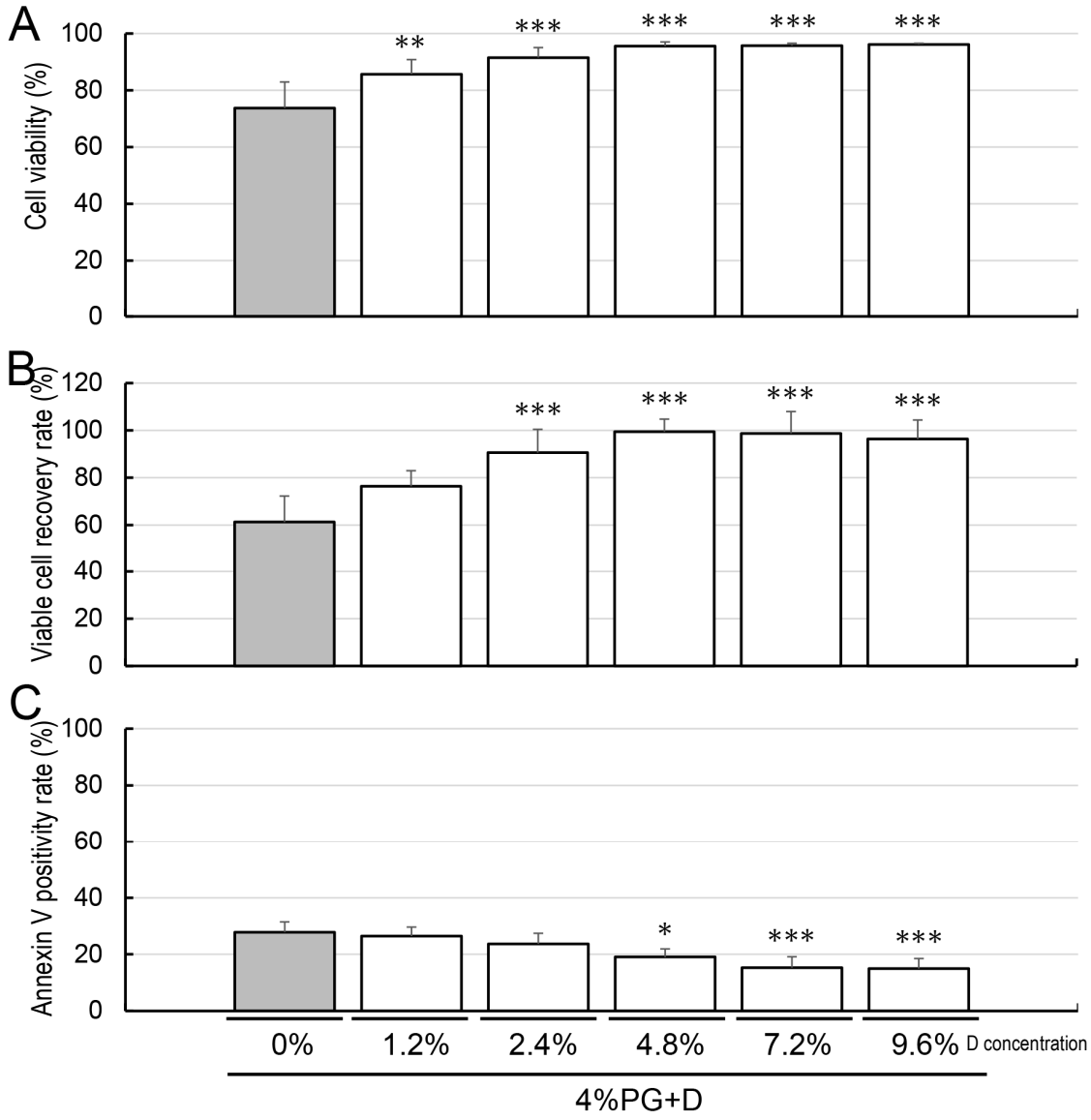
[Fig. 7]


A
Cell viability (%)
100
80
60
40
20
0
*
*
**
**
*
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
C
Annexin V positivity rate (%)
100
80
60
40
20
0
***
**
*
*
1.25%
2.5%
3.75%
5%
6.25%
7.5%
8.75%
10%
PG concentration
PG+D

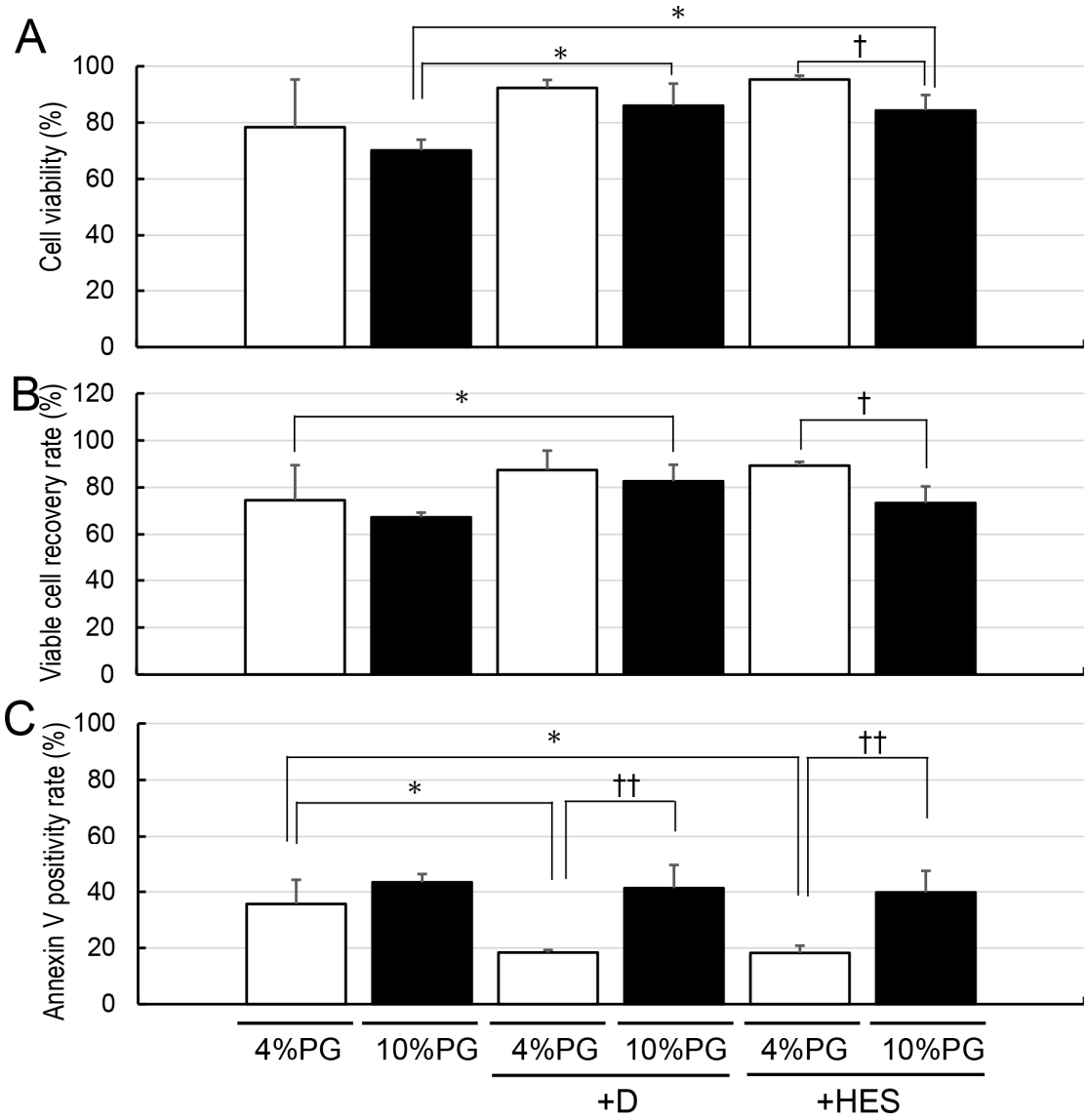
[Fig. 8]


70
60
50
40
30
20
10
0
0
2
4
6
8
Number of cells (x10⁴)
Number of culture days
1.25%
2.5%
3.75%
5%
6.25%
7.5%
8.75%
10%
**
**
**
*
*
*

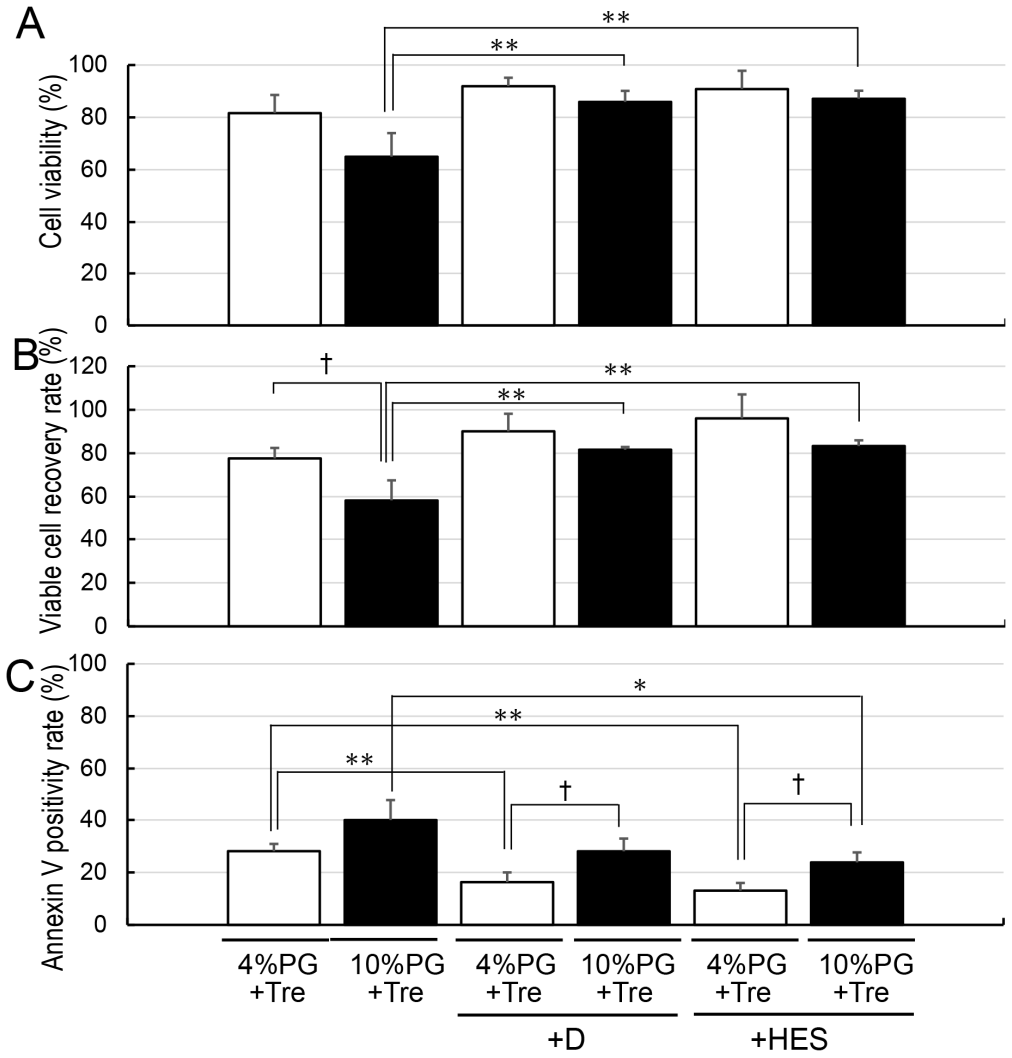
[Fig. 9]


A
Cell viability (%)
100
80
60
40
20
0
**
***
***
***
***
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
***
***
***
***
C
Annexin V positivity rate (%)
100
80
60
40
20
0
*
***
***
0%
1.2%
2.4%
4.8%
7.2%
9.6%
D concentration
4%PG+D

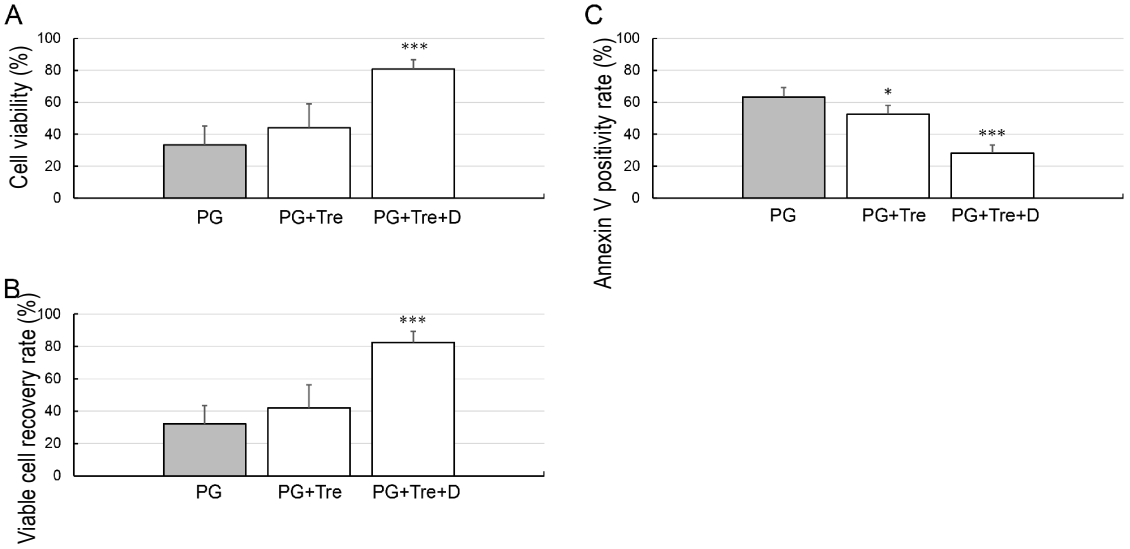
[Fig. 10]


A
Cell viability (%)
100
80
60
40
20
0
*
*
†
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
*
†
C
Annexin V positivity rate (%)
100
80
60
40
20
0
*
*
††
††
4%PG
10%PG
4%PG
10%PG
4%PG
10%PG
+D
+HES

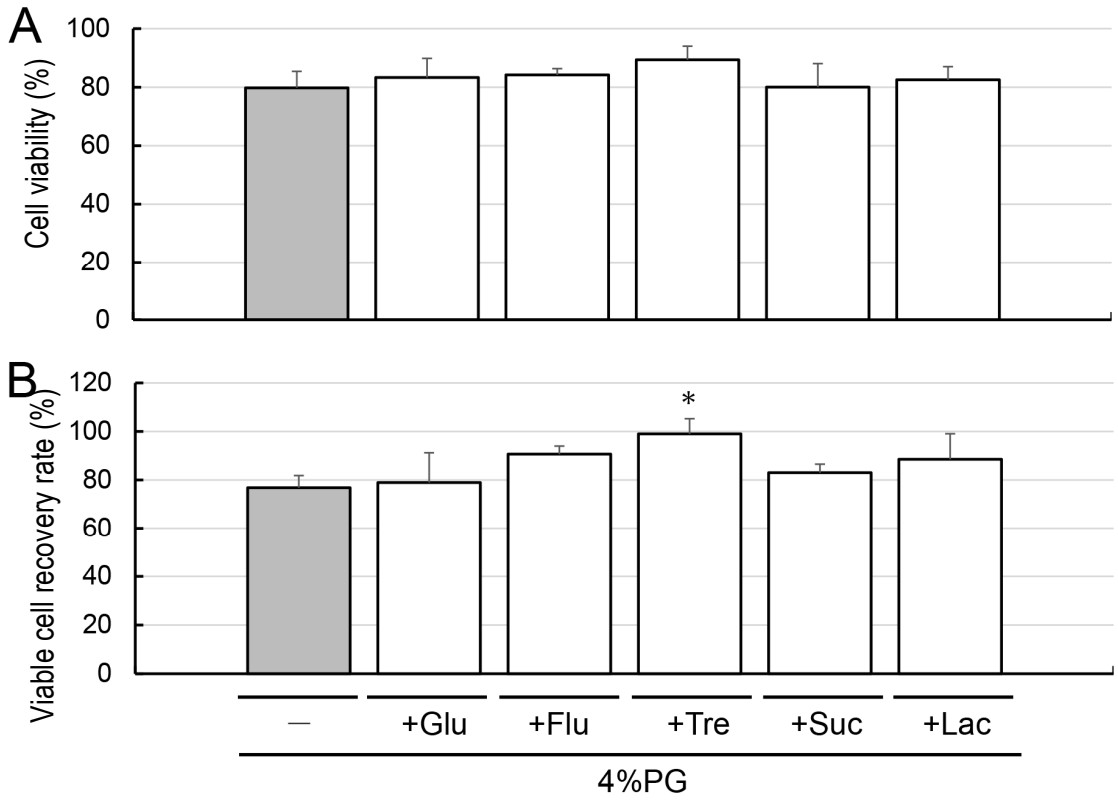
[Fig. 11]


A
Cell viability (%)
100
80
60
40
20
0
**
**
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
†
**
**
C
Annexin V positivity rate (%)
100
80
60
40
20
0
*
**
**
†
†
4%PG +Tre
10%PG +Tre
4%PG +Tre
10%PG +Tre
4%PG +Tre
10%PG +Tre
+D
+HES

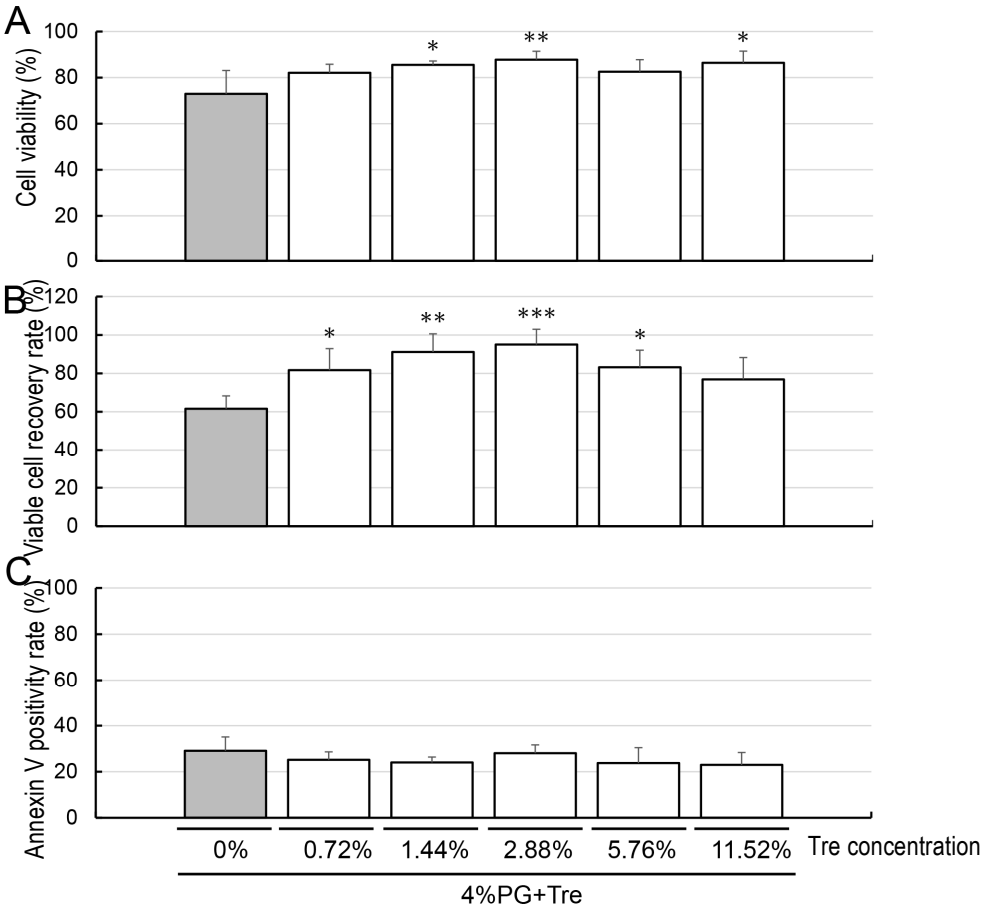
[Fig. 12]


A
Cell viability (%)
100
80
60
40
20
0
***
PG
PG+Tre
PG+Tre+D
B
Viable cell recovery rate (%)
100
80
60
40
20
0
***
PG
PG+Tre
PG+Tre+D
C
Annexin V positivity rate (%)
100
80
60
40
20
0
*
***
PG
PG+Tre
PG+Tre+D

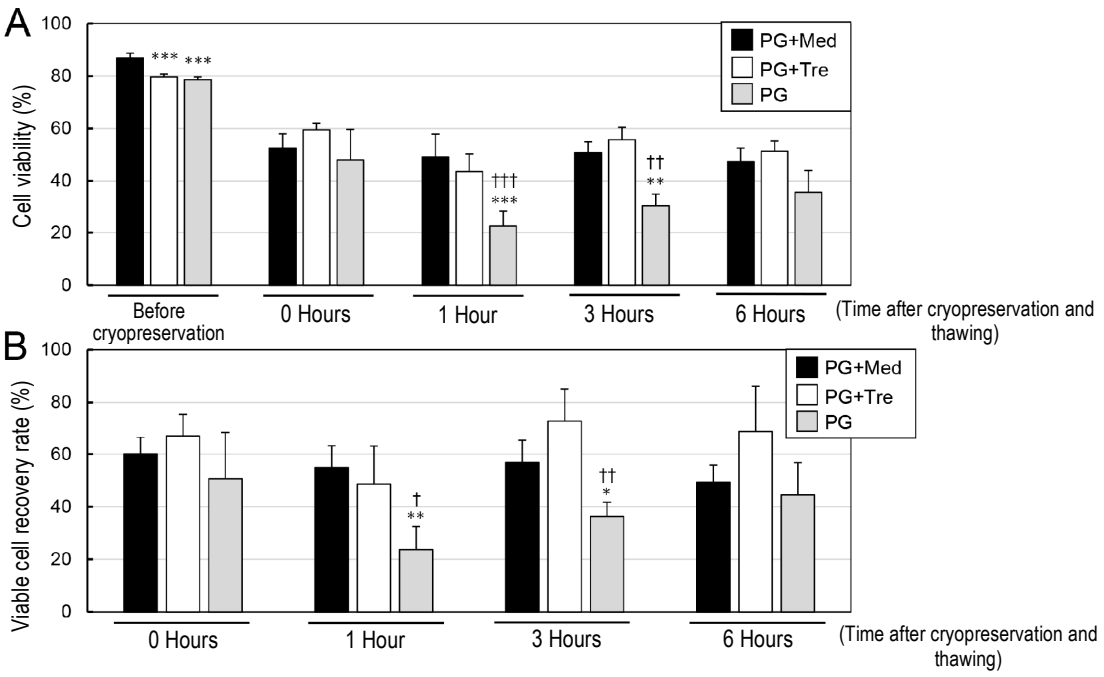
[Fig. 13]


A
Cell viability (%)
100
80
60
40
20
0
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
*
—
+Glu
+Flu
+Tre
+Suc
+Lac
4%PG

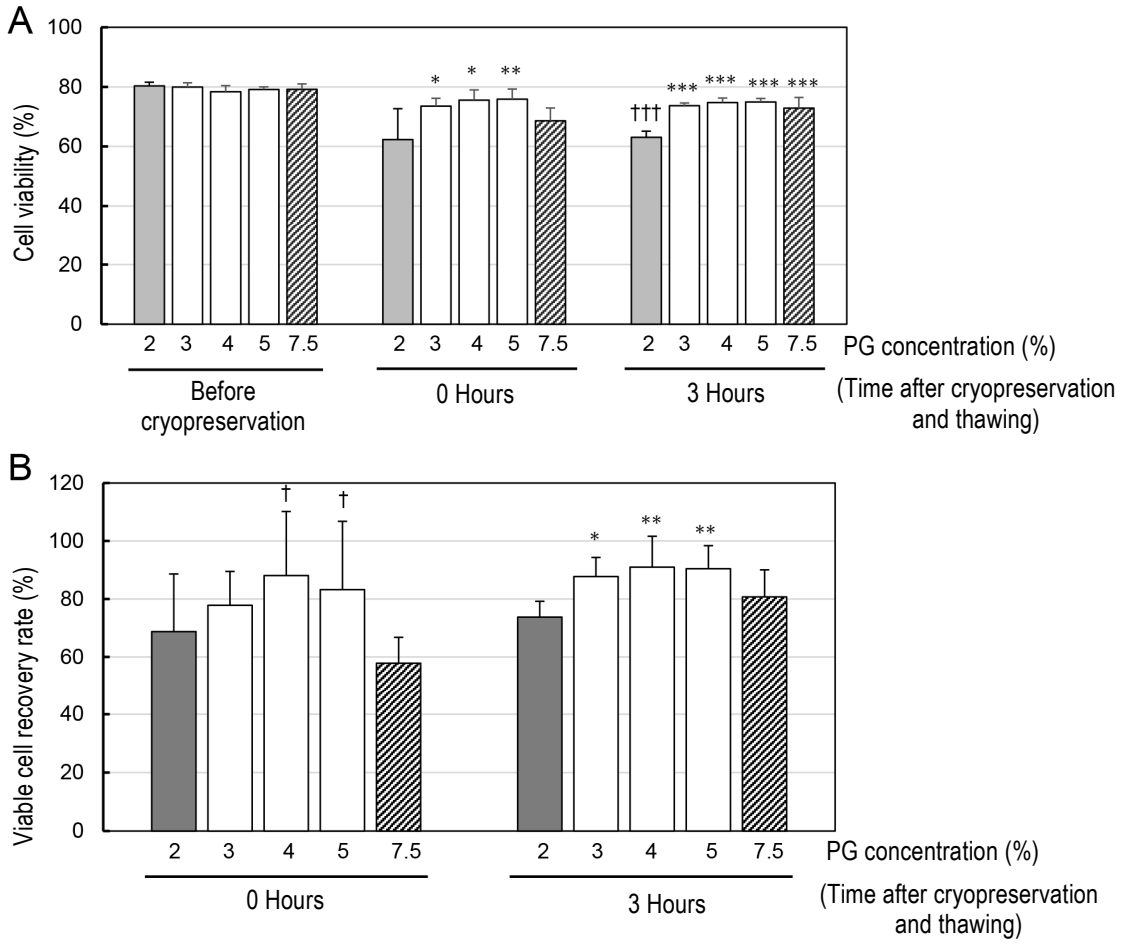
[Fig. 14]


A
Cell viability (%)
100
80
60
40
20
0
*
**
*
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
*
**
***
*
C
Annexin V positivity rate (%)
100
80
60
40
20
0
0%
0.72%
1.44%
2.88%
5.76%
11.52%
Tre concentration
4%PG+Tre

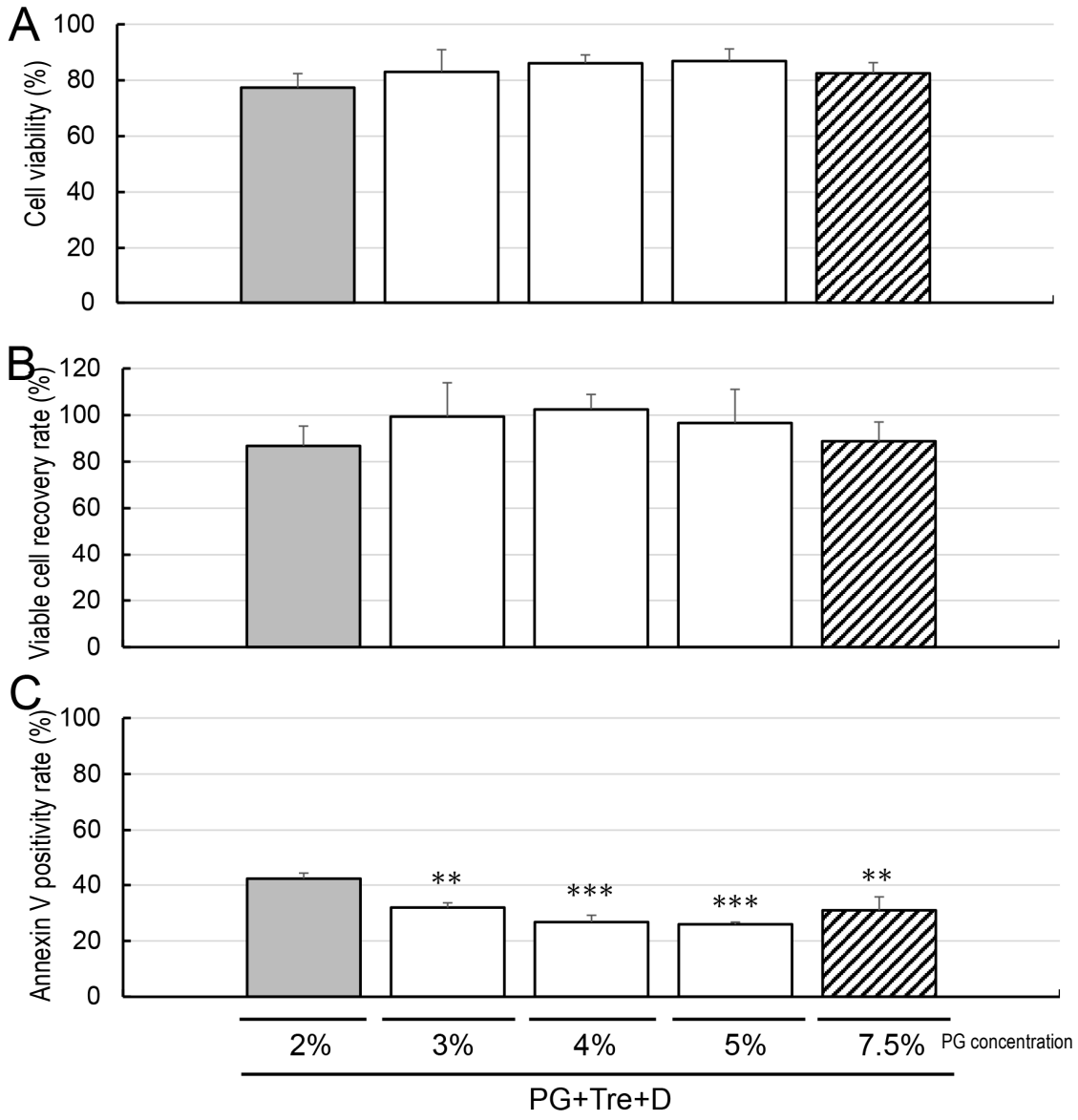
[Fig. 15]


A
Cell viability (%)
100
80
60
40
20
0
PG+Med
PG+Tre
PG
***
***
†††
***
††
**
Before cryopreservation
0 Hours
1 Hour
3 Hours
6 Hours
(Time after cryopreservation and thawing)
B
Viable cell recovery rate (%)
100
80
60
40
20
0
PG+Med
PG+Tre
PG
†
**
††
*
0 Hours
1 Hour
3 Hours
6 Hours
(Time after cryopreservation and thawing)

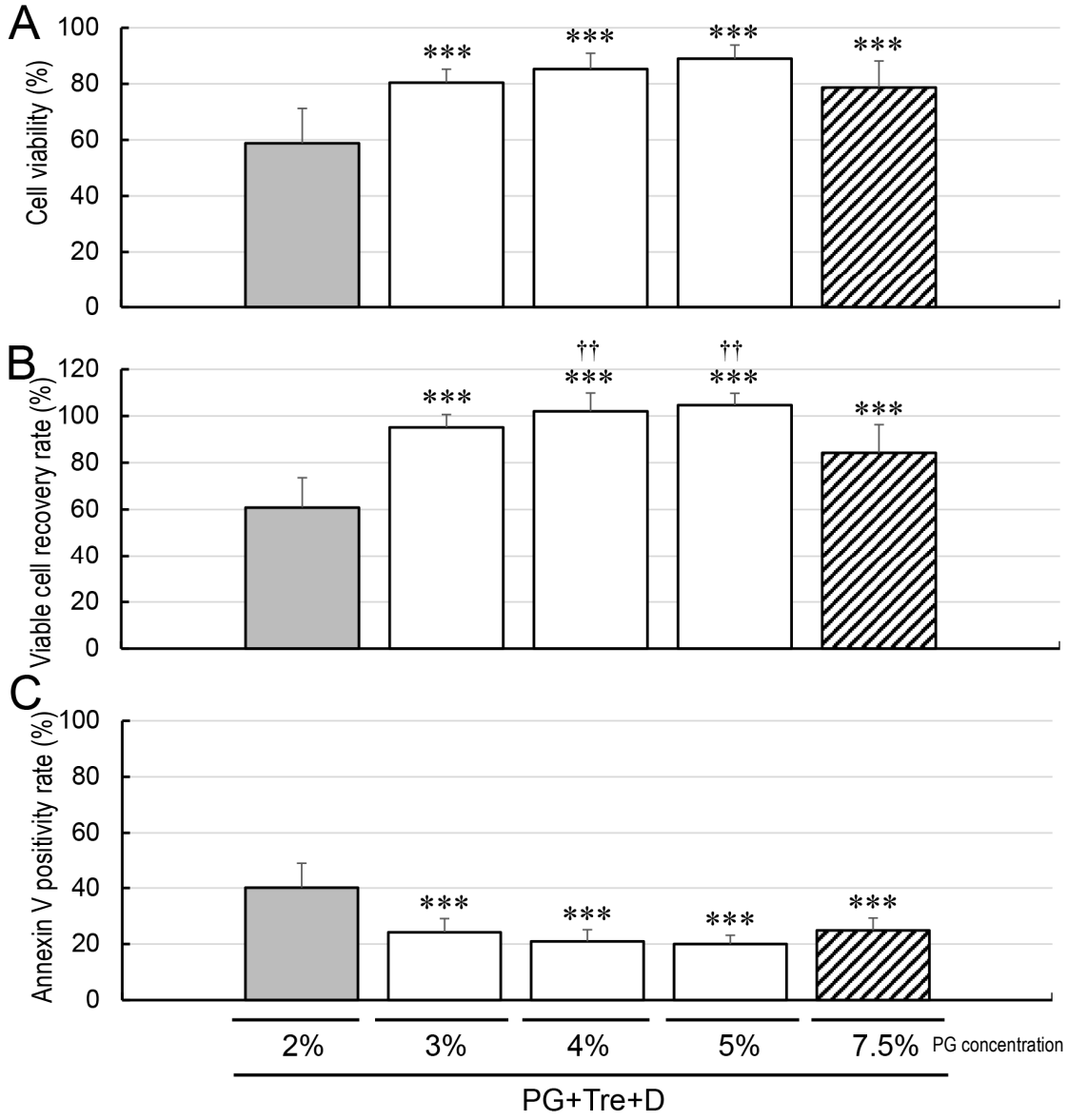
[Fig. 16]


A
Cell viability (%)
100
80
60
40
20
0
*
*
**
†††
***
***
***
***
2 3 4 5 7.5
2 3 4 5 7.5
2 3 4 5 7.5
PG concentration (%)
Before cryopreservation
0 Hours
3 Hours
(Time after cryopreservation and thawing)
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
†
†
*
**
**
2 3 4 5 7.5
2 3 4 5 7.5
PG concentration (%)
0 Hours
3 Hours
(Time after cryopreservation and thawing)

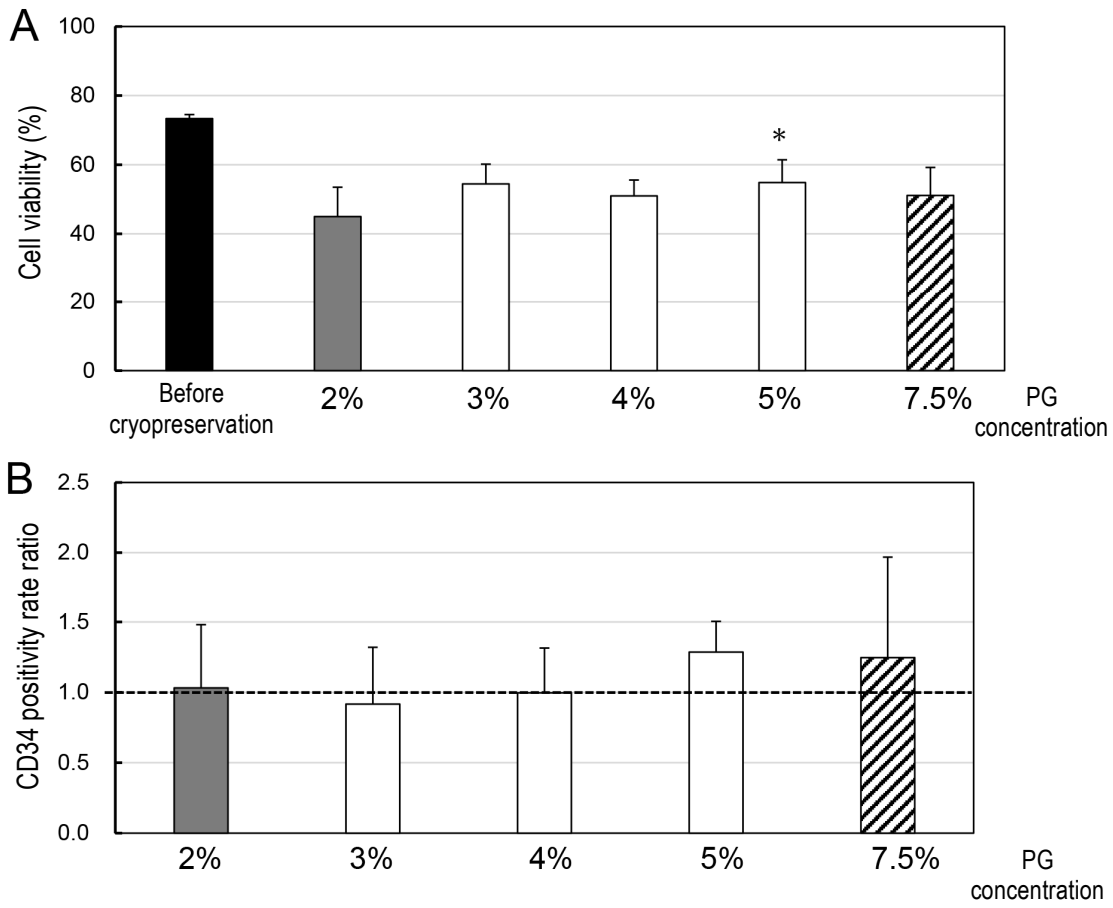
[Fig. 17]


A
Cell viability (%)
100
80
60
40
20
0
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
C
Annexin V positivity rate (%)
100
80
60
40
20
0
**
***
***
**
2%
3%
4%
5%
7.5%
PG concentration
PG+Tre+D

[Fig. 18]


A
Cell viability (%)
100
80
60
40
20
0
***
***
***
***
B
Viable cell recovery rate (%)
120
100
80
60
40
20
0
***
††
***
††
***
***
C
Annexin V positivity rate (%)
100
80
60
40
20
0
***
***
***
***
2%
3%
4%
5%
7.5%
PG concentration
PG+Tre+D

[Fig. 19]


A
Cell viability (%)
100
80
60
40
20
0
*
Before cryopreservation
2%
3%
4%
5%
7.5%
PG concentration
B
CD34 positivity rate ratio
2.5
2.0
1.5
1.0
0.5
0.0
2%
3%
4%
5%
7.5%
PG concentration