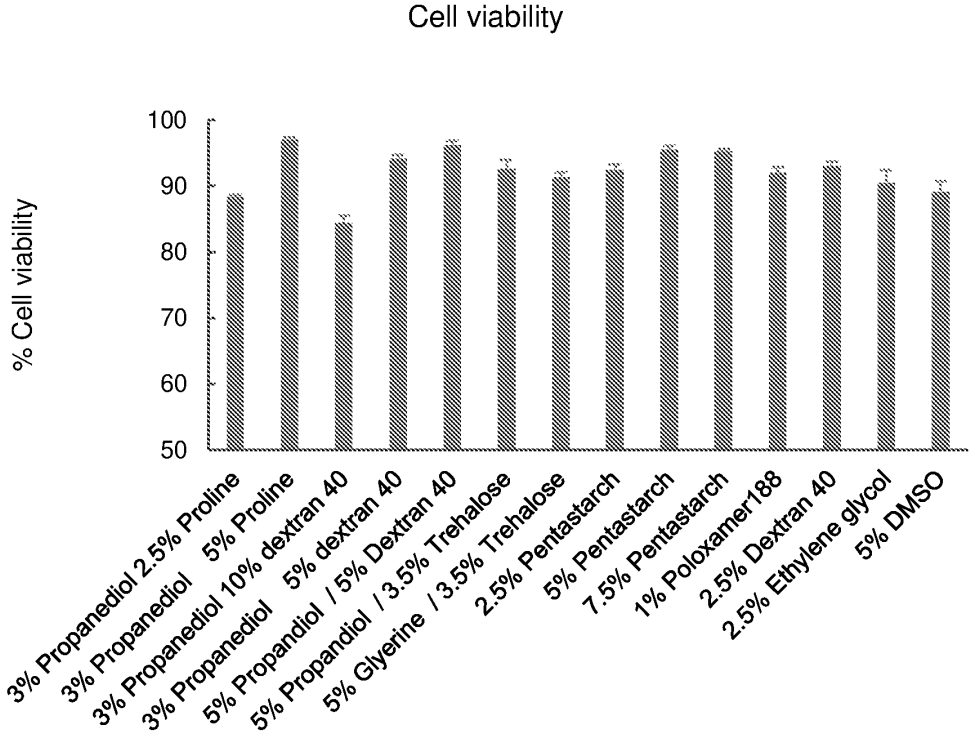

Cell viability
% Cell viability
100
90
80
70
60
50
3% Propanediol 2.5% Proline
3% Propanediol 5% Proline
3% Propanediol 10% dextran 40
3% Propanediol 5% dextran 40
5% Propandiol / 5% Dextran 40
5% Propandiol / 3.5% Trehalose
5% Glyerine / 3.5% Trehalose
2.5% Pentastarch
5% Pentastarch
7.5% Pentastarch
1% Poloxamer188
2.5% Dextran 40
2.5% Ethylene glycol
5% DMSO

FIG. 1A

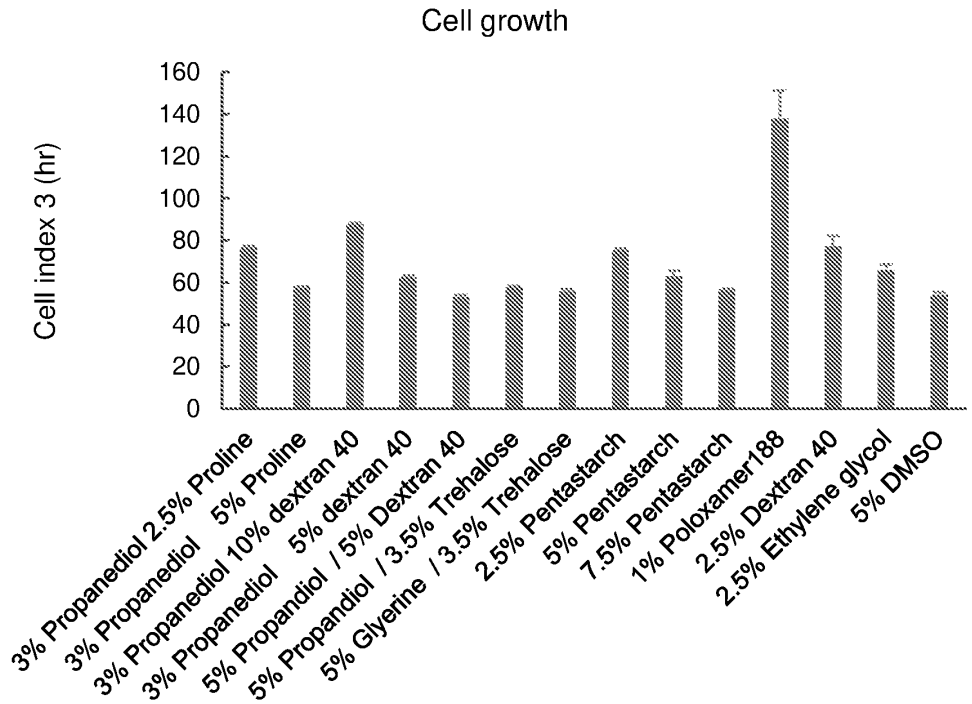

Cell growth
Cell index 3 (hr)
160
140
120
100
80
60
40
20
0
3% Propanediol 2.5% Proline
3% Propanediol 5% Proline
3% Propanediol 10% dextran 40
3% Propanediol 5% dextran 40
5% Propandiol / 5% Dextran 40
5% Propandiol / 3.5% Trehalose
5% Glyerine / 3.5% Trehalose
2.5% Pentastarch
5% Pentastarch
7.5% Pentastarch
1% Poloxamer188
2.5% Dextran 40
2.5% Ethylene glycol
5% DMSO

FIG. 1B

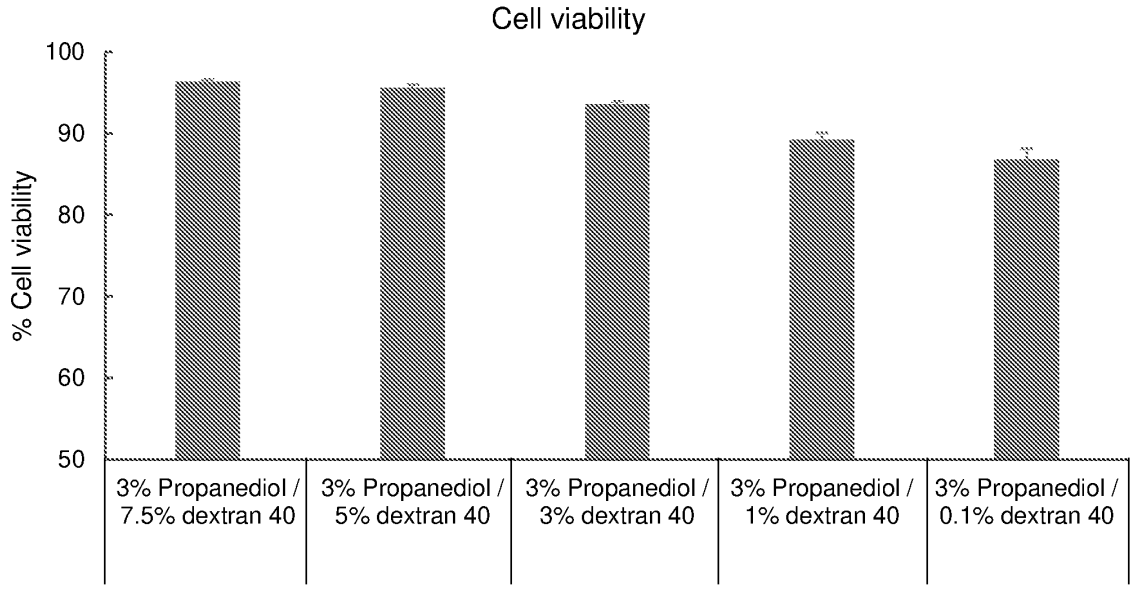

Cell viability
% Cell viability
100
90
80
70
60
50
3% Propanediol / 7.5% dextran 40
3% Propanediol / 5% dextran 40
3% Propanediol / 3% dextran 40
3% Propanediol / 1% dextran 40
3% Propanediol / 0.1% dextran 40

FIG. 2A

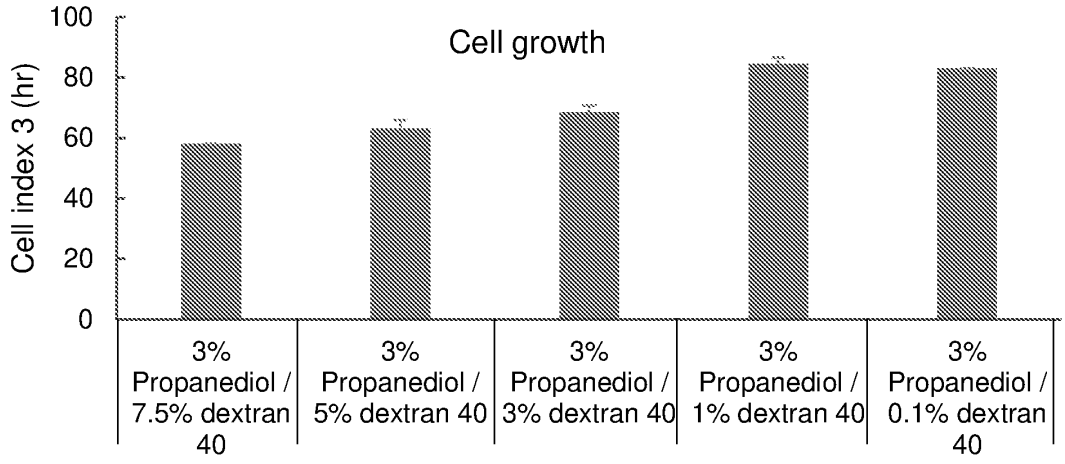

Cell growth
Cell index 3 (hr)
100
80
60
40
20
0
3% Propanediol / 7.5% dextran 40
3% Propanediol / 5% dextran 40
3% Propanediol / 3% dextran 40
3% Propanediol / 1% dextran 40
3% Propanediol / 0.1% dextran 40

FIG. 2B

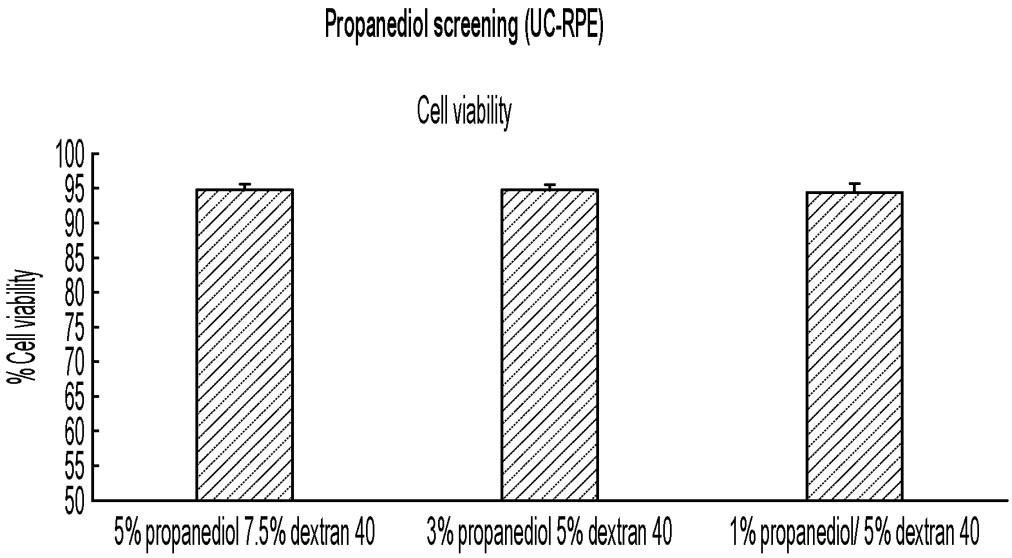

Propanediol screening (UC-RPE)
Cell viability
% Cell viability
100
95
90
85
80
75
70
65
60
55
50
5% propanediol 7.5% dextran 40
3% propanediol 5% dextran 40
1% propanediol/ 5% dextran 40

FIG. 3A

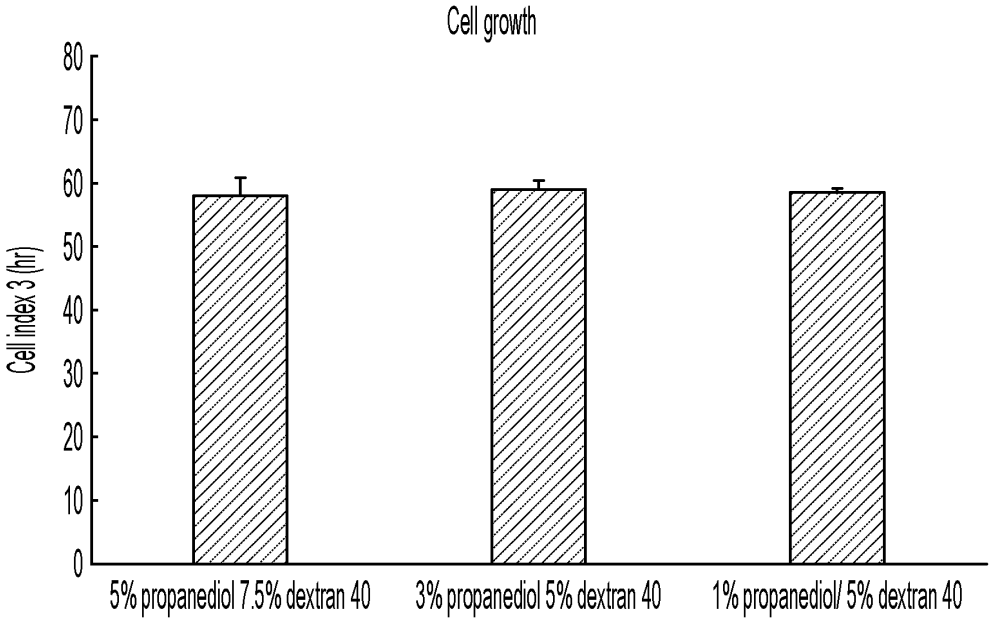

Cell growth
Cell index 3 (hr)
80
70
60
50
40
30
20
10
0
5% propanediol 7.5% dextran 40
3% propanediol 5% dextran 40
1% propanediol/ 5% dextran 40

FIG. 3B

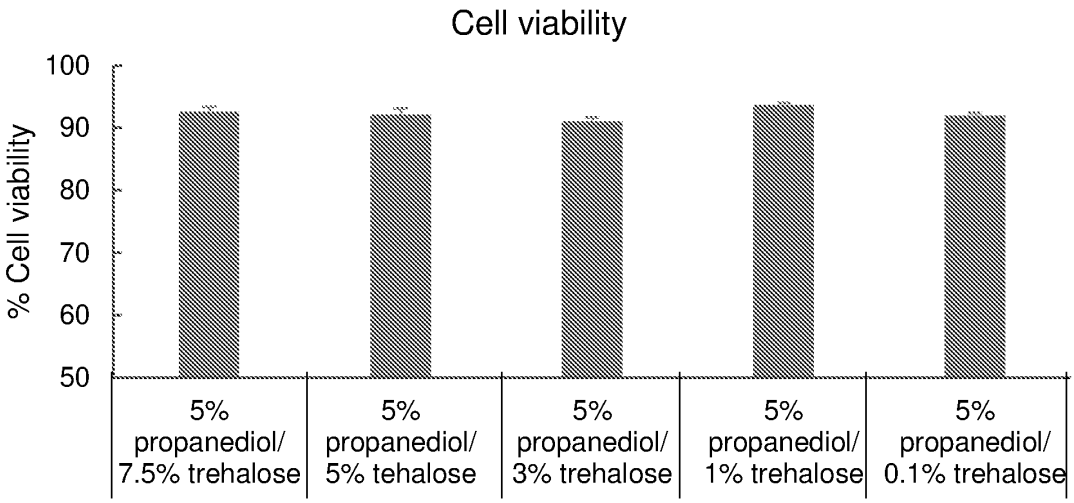

Cell viability
% Cell viability
100
90
80
70
60
50
5% propanediol/ 7.5% trehalose
5% propanediol/ 5% tehalose
5% propanediol/ 3% trehalose
5% propanediol/ 1% trehalose
5% propanediol/ 0.1% trehalose

FIG. 4A

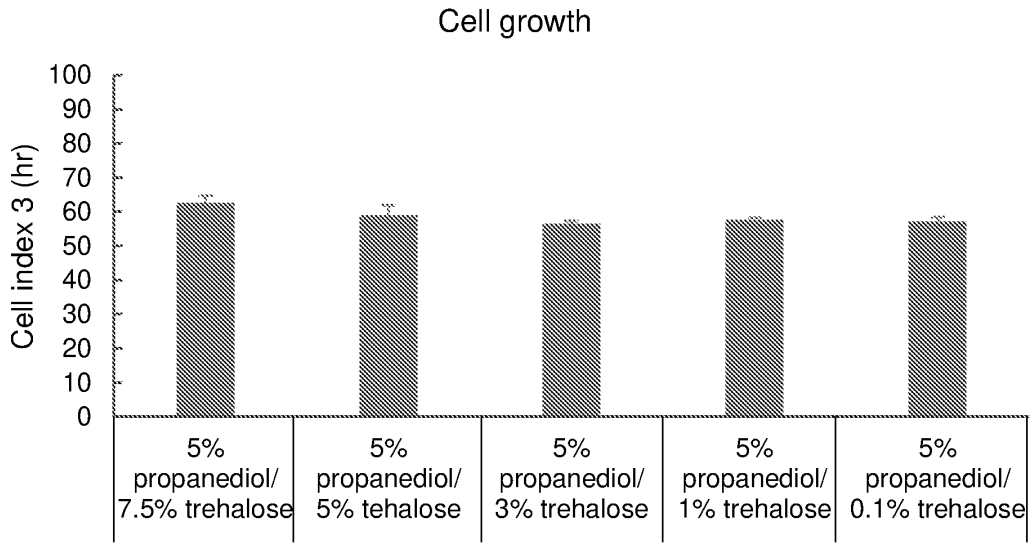

Cell growth
Cell index 3 (hr)
100
90
80
70
60
50
40
30
20
10
0
5% propanediol/ 7.5% trehalose
5% propanediol/ 5% tehalose
5% propanediol/ 3% trehalose
5% propanediol/ 1% trehalose
5% propanediol/ 0.1% trehalose

FIG. 4B

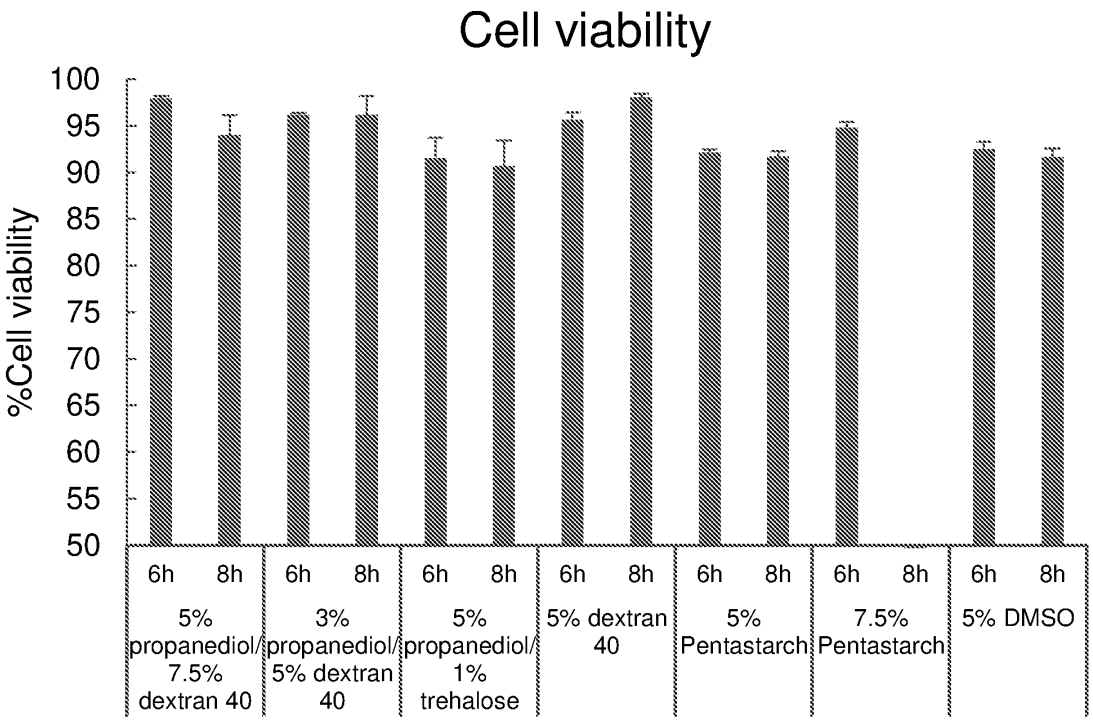

Cell viability
%Cell viability
100
95
90
85
80
75
70
65
60
55
50
6h 8h
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 5A

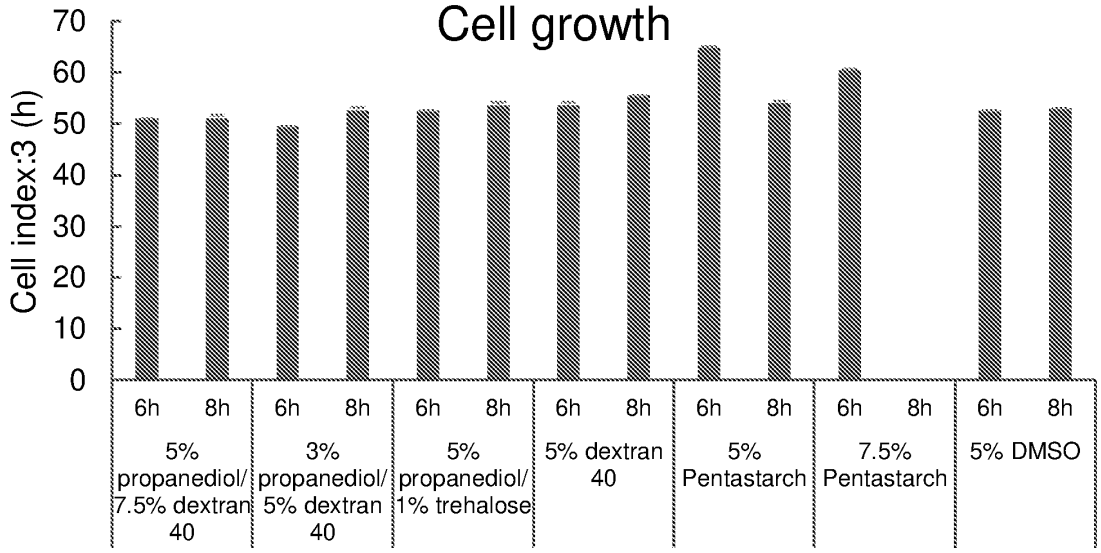

Cell growth
Cell index:3 (h)
70
60
50
40
30
20
10
0
6h 8h
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 5B

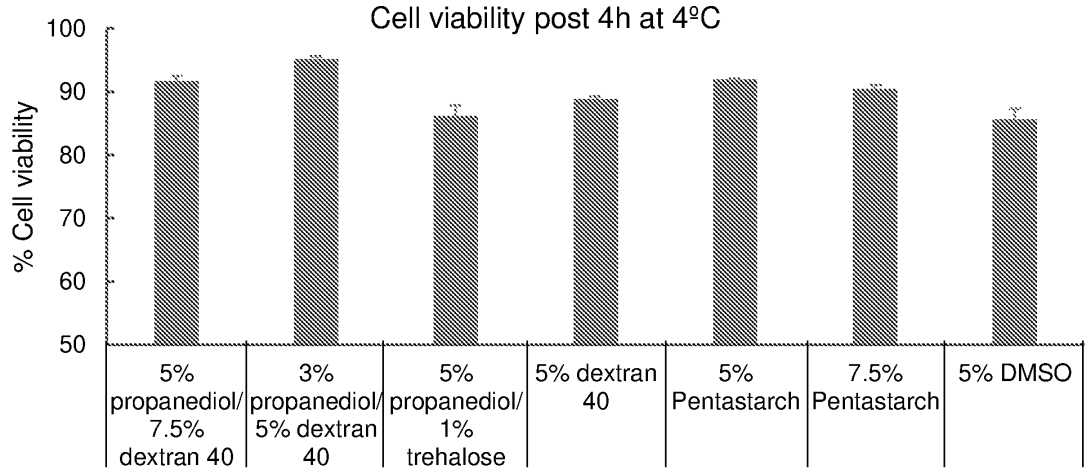

Cell viability post 4h at 4ºC
% Cell viability
100
90
80
70
60
50
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 6A

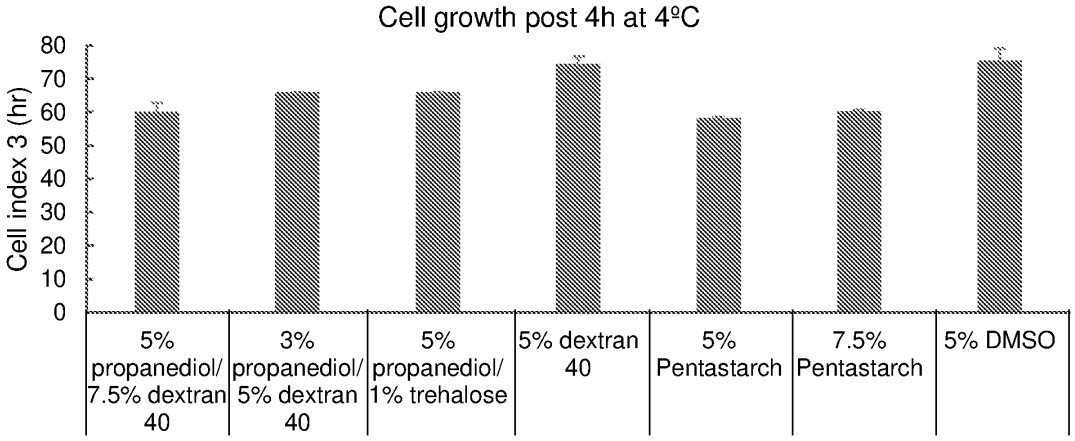

Cell growth post 4h at 4ºC
Cell index 3 (hr)
80
70
60
50
40
30
20
10
0
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 6B

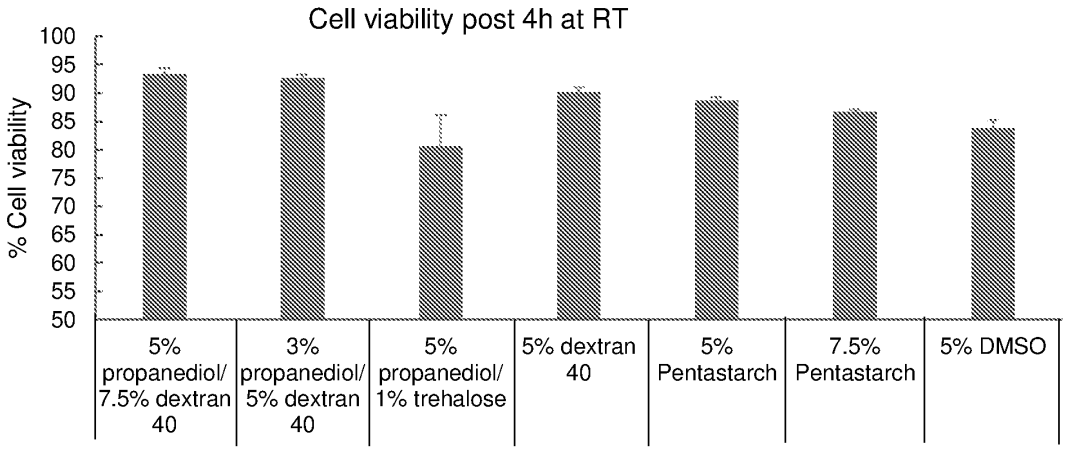

Cell viability post 4h at RT
% Cell viability
100
95
90
85
80
75
70
65
60
55
50
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 7A

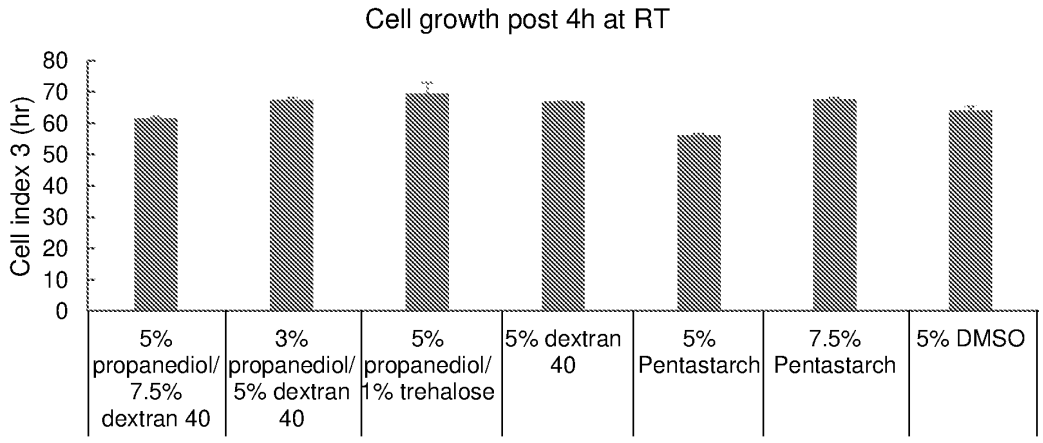

Cell growth post 4h at RT
Cell index 3 (hr)
80
70
60
50
40
30
20
10
0
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 7B

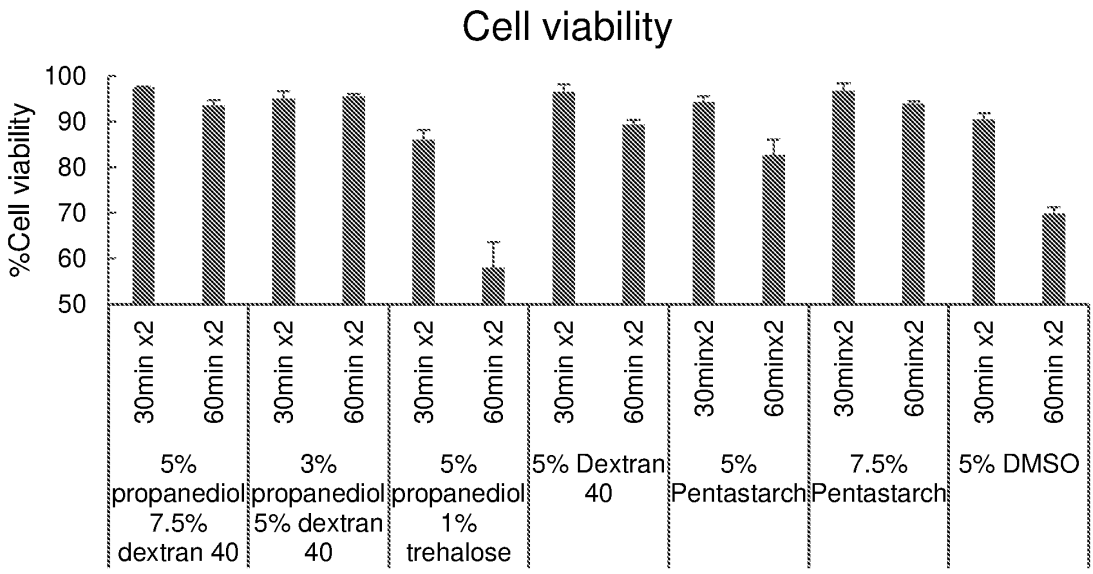

Cell viability
%Cell viability
100
90
80
70
60
50
30min x2
60min x2
30minx2
60minx2
5% propanediol 7.5% dextran 40
3% propanediol 5% dextran 40
5% propanediol 1% trehalose
5% Dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 8A

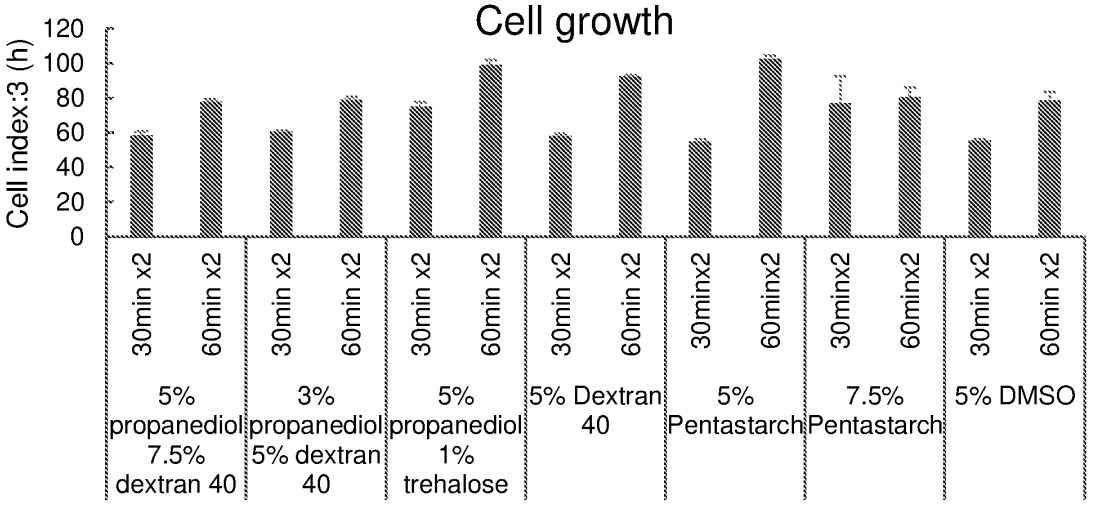

Cell growth
Cell index:3 (h)
120
100
80
60
40
20
0
30min x2
60min x2
30minx2
60minx2
5% propanediol 7.5% dextran 40
3% propanediol 5% dextran 40
5% propanediol 1% trehalose
5% Dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 8B

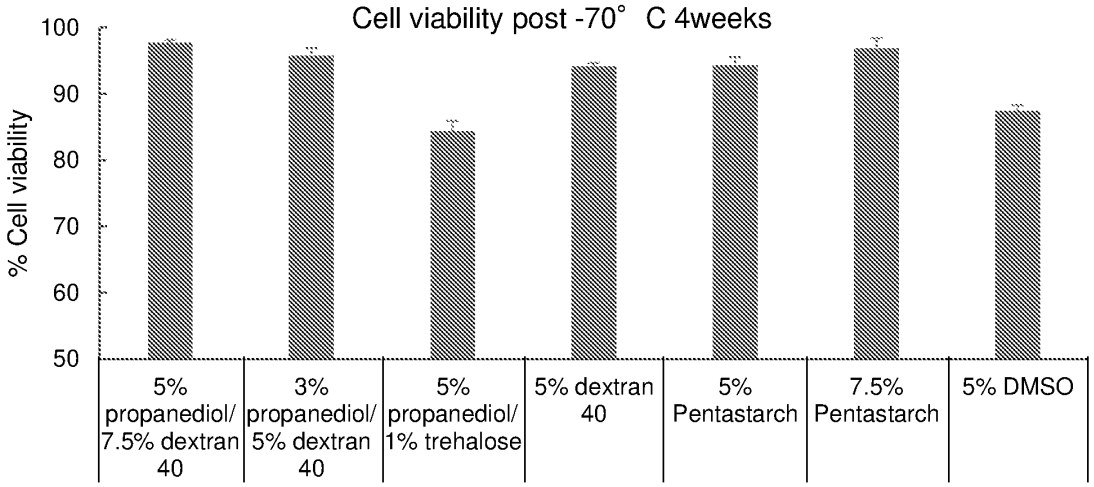

Cell viability post -70° C 4weeks
% Cell viability
100
90
80
70
60
50
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 9A

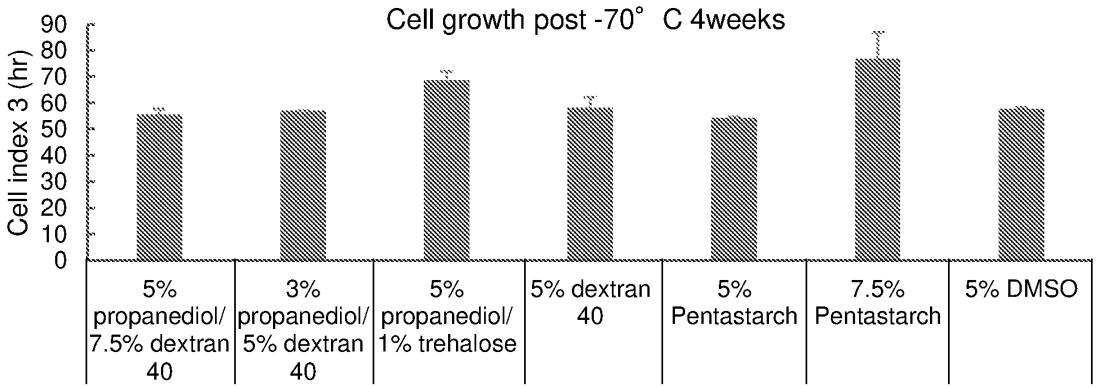

Cell growth post -70° C 4weeks
Cell index 3 (hr)
90
80
70
60
50
40
30
20
10
0
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% Pentastarch
7.5% Pentastarch
5% DMSO

FIG. 9B

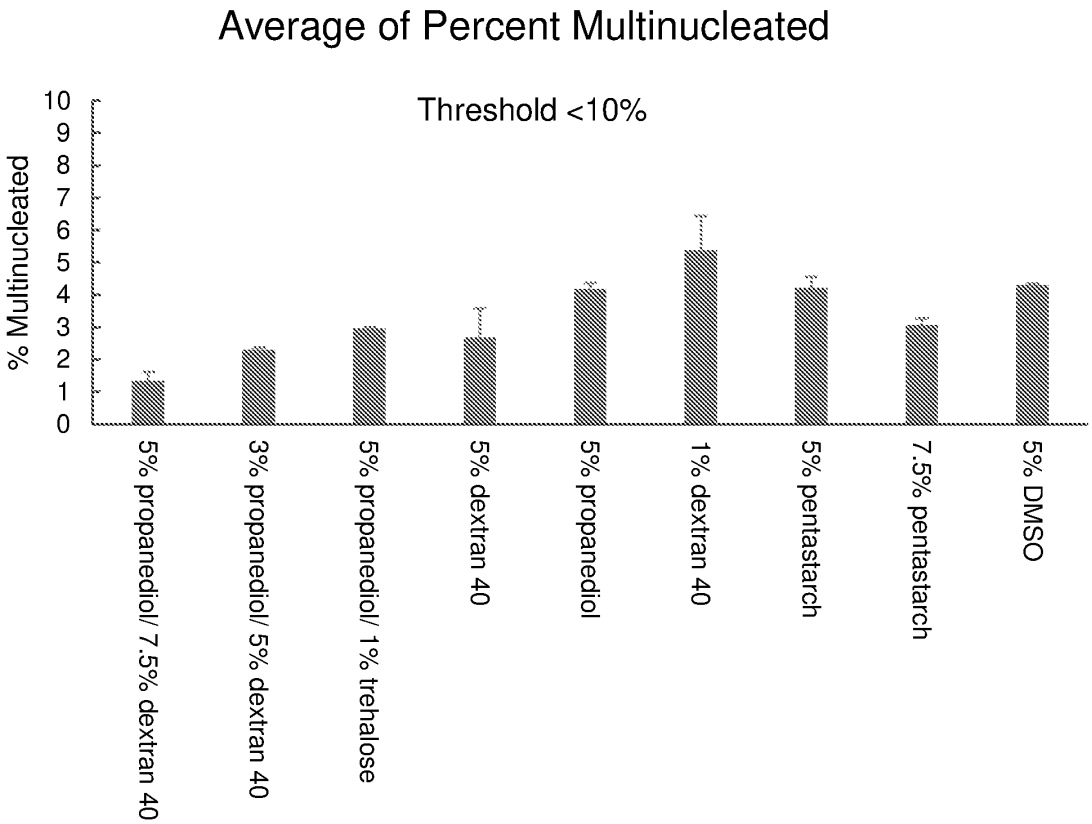

Average of Percent Multinucleated
Threshold <10%
% Multinucleated
10
9
8
7
6
5
4
3
2
1
0
5% propanediol/ 7.5% dextran 40
3% propanediol/ 5% dextran 40
5% propanediol/ 1% trehalose
5% dextran 40
5% propanediol
1% dextran 40
5% pentastarch
7.5% pentastarch
5% DMSO

FIG. 10

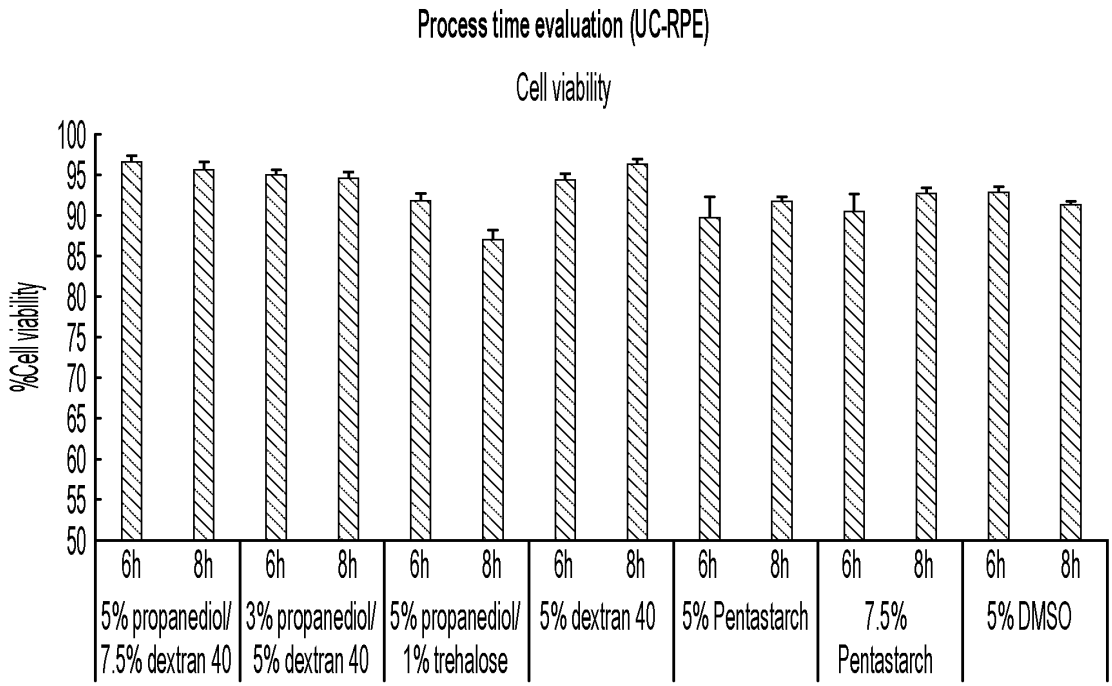


FIG. 11A

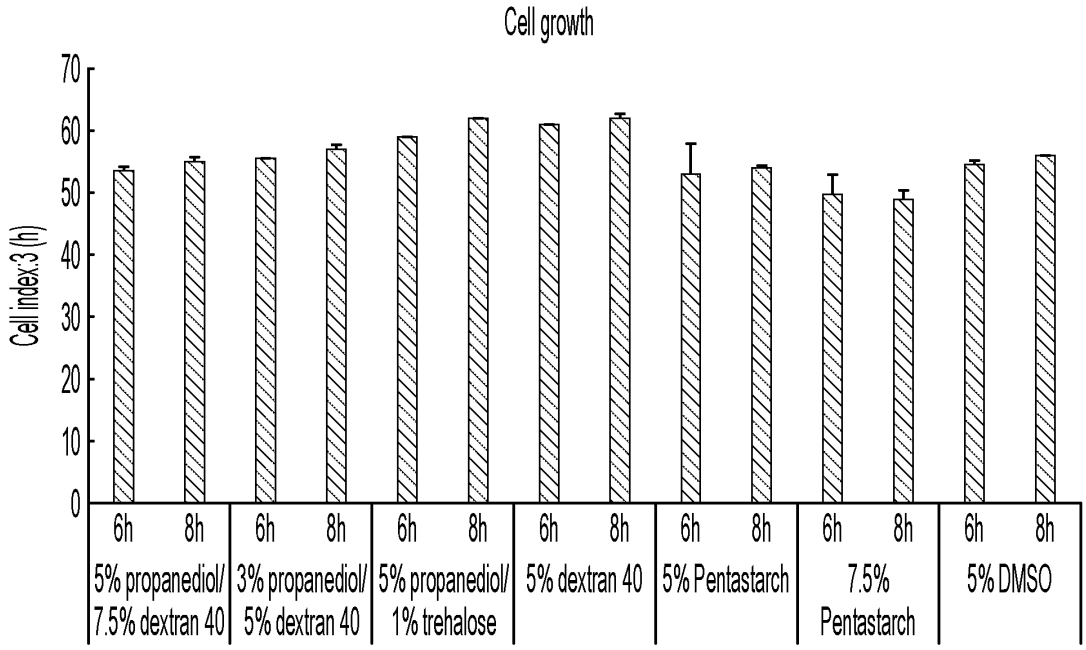


FIG. 11B